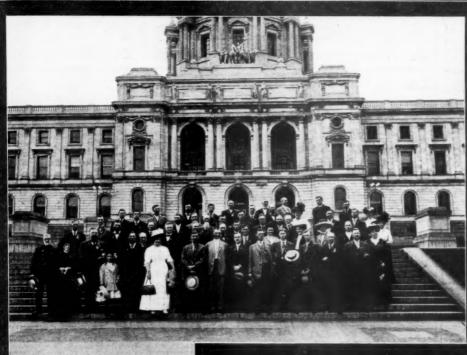
PAMERICAN BEEJOURNAL

November

1911



Calif State Library deel11 Sacramento, Galif







PUBLISHED MONTHLY BY

GEORGE W. YORK & COMPANY

117 N. Jefferson Street, Chicago, Ill.

IMPORTANT NOTICE

THE SUBSCRIPTION PRICE of this Journal is \$1.00 a year, in the United States of America (except in Chicago, where it is \$1.25), and Mexico; in Canada, \$1.10; and in all other countries in the Postal Union, 25 cents a year extra for postage. Sample copy free.

THE WRAPPER-LABEL DATE indicates the end of the month to which your subscription is paid. For instance, "decil" on your label shows that it is paid to the end of December, 1911.

SUBSCRIPTION RECEIPTS.-We do not send a receipt for money sent us to pay subscription, but change the date on your address-label. which shows that the money has been received and credited.

Advertising Rate, Per Agate Line, 15c.

14 lines make one inch. Nothing less than 4 lines accepted. DISCOUNTS:

3 times 14c a line o times 11c a line 12 "(1 yr.) 10c a line

Reading Notices, 25 cents, count line. Goes to press the 6th of each month.

National Bee-Keepers' Association.

(Organized in 1870.)

Objects.

 To promote the interests of bee-keepers.
 To protect and defend its members in their lawful rights as to keeping bees.
 To enforce laws against the adulteration of honey. Membership Dues.

One dollar a year.

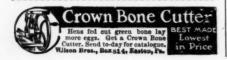
Officers and Executive Committee.

President-George W. York, Chicago, Ill. Vice-President-W. D. WRIGHT, Altamont. N. Y. Secretary—E. B. TYRRELL, 230 Woodland Ave., Detroit, Mich. Treas. and Gen. Mgr.—N. E. FRANCE, Platteville, Wis.

Twelve Directors.

Jas. A. Stone, Rt. 4, Springfield, Ill,
O. L. Hershiser, Kenmore, N. Y.
H. A. Surface, Harrisburg, Pa.
Wm. McEvoy, Woodburn, Ont., Canada.
M. H. Mendleson, Ventura. Calif.
R. C. Aikin, Loveland, Colo.
R. L. Taylor, Lapeer, Mich.
E. D. Townsend, Remus, Mich.
W. H. Laws, Beeville, Tex.
J. E. Crane, Middlebury, Vt.
E. F. Atwater, Meridian, Idaho.
R. A. Morgan, Vermilion, S. Dak.

Are you a member? If not, why not send the annual dues of \$1.00 at once to Treas. France, or to the office of the American Bee Journal, 117 N. Jefferson St., Chicago, Ill.? It will be forwarded promptly to the Treasurer, and a receipt mailed to you by him. Every progressive bee-keeper should be a member of this, the greatest bee-keepers' organization in America.



Oueens That "Are Better"— Italians & Banats

Untested, 75c each; \$8.00 per doz. Tested, \$1.25 each; \$12 per doz. Select Breeders from Full Colonies, \$3.00 each.

Wholesale price of Queens-5 dozen or more in one order, deduct 50c per dozen. After July 1st I am going to make a special introductory price for Breeder Queens that were reared early in spring, and have served me in building up populous colonies, and thereby having fully demonstrated their value. One colony of my Banats has given this season 212 pounds of surplus bulk and extracted honey. Some of my Italians were as populous, and might have given as much surplus had they been in as good location. Breeder Queens, \$3.00 each; one dozen or

more in one order, deduct 25c each.
One-frame Nuclei, with Untested Queen, \$2.00 each; 2-fr., \$3.00; 3-fr., \$4.00.
Full colonies, 10-fr., \$7.00. Add 50c if Tested Queens are wanted; add \$2.00

each if Breeder Queens are wanted.

Twenty or more Colonies or Nuclei in one order, deduct 25c each. I have six different yards several miles apart, and am prepared to fill orders promptly. I solicit your trade and guarantee you satisfaction.

J. A. Simmons, Uvalde Co. Apiaries, Sabinal, Tex.

Lewis Beeware, Bingham Smokers Dadant's Foundation.

Are Any Supplies Needed by the Bee-Keeper? BEESWAX WANTED. CATALOG FREE.

Leather-Colored and Golden Untested Italian Queens, \$1.00.

The C. M. SCOTT CO., 1004 E. Wash. St., Indianapolis, Ind.

Bees For Sale.

I have a few lots of Bees offered to me to sell, scattered in South Georgia and Middle Florida. The most of them are well located; others can be moved a short distance in good locations. The most of the bees are in modern hives, and some good bargains in the lot.

8Atf

J. J. Wilder, Cordele, Ga. Please mention Am. Bee Journal when writing. The - Biggest - Discount Of the Season on Bee-Supplies.

Send us list of goods wanted for best prices. Now Ready. Full blood pedigreed prize-winning Chickens—Barred Rocks that are BARRED; Whited Rocks and White Wyandottes that are WHITE—\$1.00 each and up. Show-birds a Specialty. Cat. ready in Jan.

Catalog Free. H. S. Duby, St. Anne, Ill. Please mention Am. Bee Journal when writing.

This <u>Big</u> Book Will ON Groceries **Furniture** Clothing **Bedding Draperies** Lingerie Glassware

> For WEAR or Crofts & Reed Co., Dept. (569 Chicago, III. Please mention Am. Bee Journal when writing

Silverware out Shoes, Furs FREE Everything :

Nanted Comb and Extracted Honey

Let us hear from you with your best price on your Comb and Extracted Honey, freight paid to Cin-We buy every time price justifies. lot too large or too small. We remit day shipment arrives.

The FRED W. MUTH CO.

THE BUSY BEE-MEN

51 Walnut Street,

CINCINNATI, OHIO



BEES AND HONEY

FIRST LESSONS IN BEE-KEEPING

NEWMAN

DADANT

The above is the title of a new and revised edition of what for many years was the book called "Bees and Honey," written by the late Thomas G. Newman, editor of the American Bee Journal. Mr. C. P. Dadant, whose reputation as a honey-producer and expert bee-keeper is unquestioned, revised the book recently. The last edition consisted of 160 pages, but the revised edition, hereafter to be known as "First Lessons in Bee-Keeping," contains nearly 200 pages, and is perhaps the most generously illustrated bee-book of its size now published, as it has over 150 pictures.

"First Lessons in Bee-Keeping" is principally for beginners in the bee-business, as its name indicates. It contains the foundation principles of bee-keeping—just what every beginner ought to know in order to start right with bees. It does not pretend to cover the subject in so thorough manner as do the higher-priced and larger bee-books, such as "Langstroth on the Honey-Bee," Prof. Cook's "Bee-Keepers' Guide," etc., but there are a large number of very important preliminary principles that should be well understood by every one who intends to take up bee-keeping, and this book is just the thing for that purpose.

It is printed on excellent paper, and well bound in pamphlet style. The outside appearance of the cover of this book, is entirely different from anything yet seen on a bee-book. One can know without reading a word that it is something about bees, by simply looking at the cover, either front or back.

We intend to present a copy to any person who sends us \$1.00 for a year's subscription in advance to the American Bee Journal, whether a new or renewal subscriber; but, of course, the booklet must be asked for when subscribing and sending the dollar.

The price of "First Lessons in Bee-Keeping," bound in strong paper, is 50 cents, postpaid. We would suggest that every Journal reader secure a copy of this book in connection with your own advance renewal subscription, and then show it to your neighbor bee-keepers, and get them to send in their subscription; or, if you wish to sell the book to your neighbors, we will make you a liberal discount for such purpose. But be sure to get a copy of the book yourself, so as to see what a beauty it is. Address,

George W. York & Co., 117 N. Jeff. St., Chicago, III.

MARSHFIELD GOODS

BEE-KEEPERS :-

We manufacture Millions of **Sections** every year that are as good as the best. The CHEAPEST for the Quality; BEST for the Price. If you buy them once, you will buy again.

We also manufacture Hives, Brood-Frames, Section-Holders and Shipping-Cases.

Our Catalog is free for the asking.

Marshfield Mfg. Co.,

Marshfield, Wis.

Please mention Am. Bee Journal when writing.

BARNES' Foot-Power



Read what J. I. PAREET, of Charlton, N. Y., says: "We cut with one of your Combined Machines, lasjude to the Charles of the Charles, as the 100 honey-boxes, and a great dea of other work. This winter we have double the amount of bee-hives, etc. to make, and we expect do it with this Saw. It will do all you say it will." Catalog and price-list free

ddiren, W. P. & JOHN BARNES, 995 Euby St., Rockford, Ill.

M. H. HUNT & SON

The best time to buy your goods is during the fall and winter months. We are making Liberal Discounts for Early Orders, and would like to quote you net prices on your needs for next season.

BEESWAX WANTED-

LANSING, - MICHIGAN. Please mention Am. Bee Journal when writing.

Bee-Keepers

Here is a bargain in No. 2

4¼x4¼ 1-Piece 2-Beeway Sections

\$3.25 per 1000. Plain, 25c less.

Send your order to-day. Also write for Catalog. 1Atf

AUG. LOTZ & CO.,

BOYD, WIS.
Please mention Am. Bee Journal when writing.

Langstroth Honey-Bee

Revised by Dadant.

Latest Edition

This is one of the standard books on bee-culture, and ought to be in the library of every bee-keeper. Bound in substantial cloth, and has nearly 600 pages. Revised by that large, practical bee-keeper, so well known to all bee-dom—Mr. C. P. Dadant. Each topic is clearly and thoroughly explained, so that by following the instructions of this book one can not fail to be wonderfully helped on the way to success with bees.

We mail the book for \$1.20, or club it with the American Bee Journal for one year—both for \$2.00. This is indeed a splendid chance to get a grand bee-book for a very little money.

GEORGE W. YORK & CO.
- CHICAGO, ILL.

"The Amateur Bee-Keeper"

This is a booklet of 86 pages, written by Mr. J. W. Rouse, of Missouri. It is mainly for beginners—amateur beekeepers—as its name indicates. It is a valuable little work, revised this year, and contains the methods of a practical, up-to-date bee-keeper of many years' experience. It is fully illustrated. Price, postpaid, 25 cents; or with the American Bee Journal one year—both for \$1.10. Send all orders to the office of the American Bee Journal.

You are particular?

about the quality and workmanship of the bee-goods you buy-you have a right to be.

Years ago, when bee-supply industries were at the "Carpenter Shop" stage, you were obliged to take what you could get—Hives poorly made and roughly finished—Sections that were made incorrectly, fit wrong, and gave you trouble.

Now things are different—nowadays bee-supplies are manufactured scientifically right at the new five-acre plant of the G. B. Lewis Company:

Lewis Beeware is the result of thirty-five years of bee-supply experience. The Head Mechanic has been with this organization thirty-five years; the Superintendent of bee-hives twenty-nine years; Superintendent of sections twenty-eight years. All these years these men have been studying methods, material, machinery, and the peculiar demand of the bee-keeping public.

Does all this mean anything to you?

The Answer is simply this: Buy LEWIS BEEWARE. Insist on LEWIS BEEWARE.

The Beeware Brand is a guarantee of success insurance in bee-keeping. Don't be satisfied at this day and age with any other make of bee-supplies.

It is sold by over thirty distributing houses in the United States and foreign countries. Ask for the name of the nearest one.

G. B. Lewis Co., Manufacturers Watertown, Wis., U. S. A.

Water-White ALFALFA HONEY

Light Amber

Light Amber FALL HONEY

In any size quantities, in any size packages.

HONEY

If your Honey Crop is short, and you want to supply your regular trade, write to us for prices. We are sure that we can supply what you want at prices you can pay. 5 cents for a liberal sample of any kind desired.

We want your BEESWAX to work into Dadant's Foundation

Or will pay Cash for it, or Exchange for Goods.

DADANT & SONS, - Hamilton, Illinois



(Entered as second-class matter July 39, 1907, at the Post-Office at Chicago, Ill., under Act of March 2, 1878.)

Published Monthly at \$1.00 a Year, by George W. York & Company, 117 North Jefferson Street,

GEORGE W. YORK, Editor. DR. C. C. MILLER, Associate Editor.

CHICAGO, ILL., NOVEMBER, 1911

Vol. LI---No. 11

EDITORIAL



COMMENTS

"Karo Corn Syrup" vs. Honey

For many a year the name of Marion Harland has been a household word. It is the pen-name of a writer whose "Common Sense in the Household" has for more than 30 years been constantly consulted in thousands of homes all over the land as a help in good cooking. Other works from her pen, and her voluminous writings in the daily press, answering thousands of questions from anxious inquirers, have helped to endear her to the heart the great public, who have felt that Marion Harland was a warm personal friend, a wise friend who always knew what was best on all questions pertaining to the matter of one's daily bread, and a friend whose word could always be relied on-utterly dependable.

When the October number of leading popular magazines appeared many must have gasped with astonishment when they faced a full-page advertisement of Karo, the chief part of the advertisement being the following, in bold, black type:

I do not hesitate to award Karo the preference above any other table syrup used in my household.

As an accompaniment to waffles and griddle-cakes it deserves all that can be said in praise of it. It is as clear and as sweet as honey, and richer in consistency without the cloying quality that makes honey distasteful to some, and unwholesome if eaten freely.

freely.

I have also used Karo in the preparation of puddings and gingerbread, and with satisfactory results. The candies made from it are pure and delicious.

MARION HARLAND.

One can imagine something of the thoughts and the questionings awak-ened upon the reading of that remarkable statement. After the first shock of surprise there will probably be some analysis of the statement: "Karo the preference over any other table syrup used in my household!" And Karo is glucose! Does that mean that Marion Harland uses nothing better than glucose in her household, or does it mean that after trying all kinds of syrups she finds glucose the best? "As an accomfinds glucose the best? "As an accompaniment to waffles and griddle-cakes it deserves all that can be said in praise of it." All that can be said. It can be said to have a flavor superior to the best of honey, and greatly to excel honey in wholesomeness; and that

praise it deserves! "Clear and sweet as honey and richer in consistency." Now what does that in consistency." Now what does that "richer in consistency" mean? Does it mean that Karo is thicker than the thickest honey, even if the honey be granulated? Or what can it mean? granulated? "Without the cloying quality that makes honey distasteful to some, and unwholesome if eaten freely." Does that mean that it is always dangerous to eat honey freely? What will be thought of such a thing in families where honey is a common article of food and where there is no restriction put upon the amount eaten by the chil-Does the cloying quality make it unwholesome for them? "The candies from it are pure and delicious.' Pure? Pure glucose?

But before there is time to formulate all this into words, the question will be raised, "Is it Marion Harland that says Our Marion Harland? Marion Harland whose every word is always true as gospel? It can not be. But there is the fac-simile of her writ-ten signature, 'Marion Harland!' Can it be that she really believes that signed statement? Does she actually know so little of the comparative characteristics of honey and glucose? Can she be in her dotage? Or can it be possible that there was some financial inducement in the case?"

Although answers to such questions may not be obtained, and although the whole matter must be left in amazement and doubt, one or two comments

may not be out of place. First, that in groping after words to express the superlative excellence of glucose, the only thing sufficiently approaching it to be worth mentioning is honey. Sugar, drips, Louisiana molasses, maple, and all the rest passed by in silence as being inferior—honey being the only thing to be compared with the incomparable. Let us be thankful for so much of a compliment to honey, even though it fall far below glucose.

Another thing should not escape mention: Those full-page display advertisements were not inserted for nothing. They cost money. A lot of The manufacturers of glucose are very likely shrewd business men who are not throwing away money. They have been advertising Karo long enough to be able to judge whether it pays or not. Evidently they think it They make the statement that 70,000,000 cans of Karo were consumed in 1910. Taking that at its face value, and figuring those cans at one pound each (although certainly all were not such small cans), it would make 35,000 tons, and if we allow 35,000 pounds to a carload, it would take a train of 2000 cars to haul it. And what has sold it?

Advertising.

Now the question is, if advertising that tastes will do so much for a thing that tastes no better than glucose, what would it not do for so good a sweet as honey? And if it pays to spend huge sums to advertise glucose, would it not equally pay to spend the same amount for something so superior that it needs no misrepresentation?

But the glucose business, instead of being in the hands of thousands, as is honey-business, is mainly in the hands of one company, and that makes a big difference. Well, then, why would it not pay to have a company take over the honey-business, as has been done with the glucose business? Or, what would amount to the same thing, why not have all the bee-keepers of the country get together as one company, and thus be enabled to advertise on an equal footing with the glucose interests? Will they do it? If not, why not?

Best Bees to Resist Foul Brood

Nowadays the question is asked more than once, "What bees are best to resist foul brood?" It has been pretty generally understood that Italians are better than blacks for this pur-

pose. Wm. McEvoy is asked in the Canadian Bee Journal whether there are more kinds than one of Italians, and which kind is best to resist disease, and answers that there is one kind of Italians with varying shades of color, and to the specific question, "Which is the better kind to use for Italianizing against black brood?" answers, "Where Italians have been bred from the colonies that have given the largest yields of honey in an apiary, I would accept these in preference to any other for every purpose."

for every purpose."

Mr. McEvoy's answer is good. No breed of bees is immune to foul brood, but some will resist better than others; and the colony that is most vigorous in gathering stores will use the same vigor in resisting disease. We can not measure directly the disease-resisting strength of each colony, but we can measure the storing strength, and be

guided thereby.

But it may be asked, "Why does Mr. McEvoy put the word 'Italian' at all in his answer? Will not the bees which store the most honey be the best to resist disease, whether they have any yellow bands or not?" Very likely. All Italians are not of equal vigor. All blacks are not of equal vigor. Pit the best colony of blacks that can be found against the poorest colony of Italians that can be found, and the blacks will no doubt store more than the Italians; and equally they will do better at resist ing disease. Italians resist disease not because they are yellow, but because they are vigorous. The first cross be-tween blacks and Italians are as good storers generally as the pure stock—sometimes better; and by the same token they may be as good or better at resisting disease. Even so, there is a reason for preferring the pure stock because of the relation it has to the future. The cross between the two bloods is not as stable as the pure blood. Continue breeding from the cross, and there is likely to be deterioration, while if you persist with the pure blood there will be more stability, less likelihood of variation, and so it will be an easier thing to perpetuate any good qualities found.
So, whether one be striving for bees

So, whether one be striving for bees that will best resist disease, or for bees that will store the most honey, it is well to stick as closely as possible to bees of pure blood. This is not saying that there might not be obtained something superior by crossing, but it will not be gained in a day, and the most ready way to reach the goal is through

pure blood.

Slow Feeding for Brood-Rearing

Gleanings in Bee Culture reports experiments with regard to feeding bees for the purpose of getting them to rear brood at a time when they are getting no stores from the field. This is a matter of interest to those who have no fall flow, and yet wish to build up colonies that are too weak for winter. Indeed, in places where the honey-flow closed very early, it may be desirable to feed even strong colonies, as otherwise there would be nothing but very old bees to enter the winter. Editor Root says:

"Half a pint of syrup daily will start

when the bees can fly; but, unfortunately, bees will take the half-pint out of the ordinary feeder in about an hour's time. So much food coming in all at once, then stopping short off, causes general excitement, making more or less of an uproar in the apiary. This unduly wears out the wings of the bees, makes them cross, and is liable to cause robbing, for the bees in the air will hunt high and low to find where this supply of food came from. This is a needless waste of energy and bee-life."

So he has fallen upon the plan of soldering up all but one or two of the holes of a pepper-box feeder, so that it will take the whole of the 24 hours for the colony to take the half-pint of feed, and he thinks that produces more brood for the same amount of sugar than would be produced if the bees could take it in an hour's time.

One can but wonder why a thinner syrup would not serve better. There may be some reason against it, but on the face of it it looks as if 3 parts water to one of sugar would be better than the half-and-half syrup used. That would be more like the nectar of flowers in consistency, and so would appear more natural. Cutting the bees down to one hole allows only a few bees at a time to get at the feed. With 3 times as much water there would be 3 times as many holes, and 3 times as many bees would get at the feed. Is there any objection to the thinner feed?

Nature's Order in the Bee-Hive

The beginner who opens a hive early in the spring, and finds several combs well filled with honey, and the remain-der partly filled with brood and filled out with honey, is likely to think that there is little chance for the colony to build up, seeing that there is so little room in the combs for brood. But gradually the amount of honey melts away, while with even step the amount of brood increases. The dependence is on the stores already laid up in the hives, for there is little to be gathered outside, and if pasturage were abundant the force of gatherers is too small to take advantage of it. Even the seasoned veteran is likely to be surprised at the enormous amount of stores consumed in brood-rearing in the early part of the season, and there is little occasion for worry lest there shall be too little room for the queen to lay because of too much honey in the hive.

After a time a very different state of affairs is presented when the hive is opened, say about the beginning of the main honey harvest. One can easily imagine a beginner saying: it's time something were done here. Brood in every one of the 8 frames in the hive; 6 of them about full, and the outside 2 with brood wherever the cells are not filled with pollen, and not a half pound of honey in the whole hive. If the honey in the hive disappeared so fast when there was only half as much brood, it must be disappearing a good deal faster now, and starvation is about certain unless I interfere." Generally speaking, however, there is no cause for alarm. It is true that honey is used much faster with the greater amount of brood, but it is also true that now there is more to be had in the field, and a much larger force to gather True, if a few days of bad weather should occur, preventing the foragers from going afield, the result might be somewhat disastrous, and it is not the very best thing to let a colony get down to its last half pound of honey; but in a single good day the present large force of field-bees can provide against several days of bad weather.

Then another thought will

Then another thought will suggest itself to the beginner, and he will say: "It certainly doesn't look as if 8 frames were enough to provide stores for winter. Brood takes up so much of the room that if every cell in the hive unoccupied with brood were to be crammed with honey there wouldn't be enough honey in the hive to carry the colony to the middle of winter." But further experience will teach him that with 8 frames there will generally be abundant stores for winter, even though there might be still greater safety in a 10-frame hive.

Now let the beginner open the hive again late in the season. He exclaims: "This hive is so crowded with honey that the queen is crowded out, and there is hardly any brood in the hive. Is it not necessary to extract a comb or two so as to give room for the queen to lay?" But if he follows out the suggestion, emptying one or more frames, he does not find that it makes any perceptible difference in the laying of the queen. The fact is that the bees have been wisely carrying out the plans of Dame Nature, and gradually the broodnest has shrunk, the store of honey following up the receding brood, and filling the vacant cells.

Thus it is that the changes occur throughout the season, the brood-chamber at one time overflowed with brood, and at another time seeming nothing but a store-house for honey;

all in its due season.

Deportment of a Virgin Queen

Adolf Mueller, after 20 years' experience, gives in Prakt. Wegweiser some items of interest regarding young queens. After a virgin has patrolled the hive for 5 days, and has become sole monarch, she takes her first flight. On this first day of flight she comes to the entrance, looks about for some fime, flies backward like every other young bee marking the entrance, then takes a wider flight, and in the course of 5 minutes returns to the hive. That's enough for the first day, and if it is windy or clouds over she hurries home in less time.

The next day, weather being favorable, she generally takes 2 or 3 flights somewhere between 12 and 4 o'clock. Neither of these flights exceeds 5 minutes, and during the time of each flight the colony flies stronger than usual.

On the succeeding day she seems to be driven out by the workers, who tickle her with their antennæ, and even bite her with their jaws.

After any absence of 15 to 25 minutes she returns to the hive, and the bees which had shown a great state of excitement immediately subside. In about 24 hours the queen begins to lay. Sometimes, however, daily flights may occur 5 days in succession before fertilization occurs. Bad weather may delay fertilization, and in one case fertilization did not occur until the young queen was 27 days old, and she began to lay the next day.

MISCELLANEOUS NEWS ITEMS



Death of E. C. Porter.-Every well-informed bee-keeper is familiar with the Porter bee-escape-that big little instrument that is such a help when taking honey off the hives. Its inventor was E. C. Porter, of Lewistown, Ill., whose death last August is recorded in the following from Gleanings in Bee Culture for Oct. 15, 1911:

Culture for Oct. 15, 1911:

Edmond C. Porter was born June 10, 1857, and died Aug. 6, 1011. He was the only child of Rufus and Mary E. Porter. He was a man of excellent character and sterling worth. He was honorable, reticent, studious and industrious, taking the utmost pains to perfect anything he undertook along any line of work. He possessed a vast fund of knowledge on various topics—very unusual in this day of rush and hustle. Nothing but the best satisfied him; and if any question came up, he did not rest until he had answered it, and was sure he was right. He was an ardent lover of Nature, and it was his pride to cultivate choice varieties of fruit and plants.

His father, Rufus Porter, was a rearer of bees, and from his earliest childhood Edmond, too, loved and worked with them.

While Mr. Rufus Porter was the original inventor of the Porter bee-escape, the son improved upon it, and it was he who manufactured them and placed them on the market.

Lust before his death he had been granted

Just before his death he had been granted a patent on the improvement. He had many bees of his own, and made a specialty of extend honey.

bees of his own, and made a specialty of extracted honey.

He was a fine financier, and, in addition to the bee-industry, he had a large farm, and took charge of the tile-factory which belonged to his father.

He was unmarried, and had always been at home with his mother, to whom he was devoted, especially since the father's death 7 years ago. He has given her the most tender love and care. She is now well advanced in years, and feels his loss keenly.

He was loyal to his friends, just and generous to all, and in his death we have lost a really good man who will be greatly missed in the community in which he lived.

We understand that Mr Porter's

We understand that Mr. Porter's business is to be continued at Lewistown, Ill., under the supervision of Mr. H. D. Rogers, a cousin of Mr. Porter.

The American Bee Journal desires to unite with bee-keepers everywhere in extending sympathy to Mr. Porter's mother, in her bereavement.

What Makes Low Prices for Honey? Replying to the claim that the price of honey is simply a matter of supply and demand, Editor Tyrrell says in the Bee-Keepers' Review:

Isn't it more of a question of proper distribution? Are all honey consumers properly supplied? And isn't it a fact that many honey-producers do not get the market price for their honey simply because they don't ask enough?

A few days ago a honey-buyer showed me a nice lot of honey that he had bought at 12½ cents per pound, from a bee-keeper who couldn't afford to take a bee-paper. The honey could have been sold in a wholesale way at 18 cents. What had supply and demand to do with the sale?

Age of Flight of Young Bees.-L. S. Crawshaw asks in the British Bee Journal: "Is it established beyond doubt that no bee less than 14 days old will join the swarm?" and speaks of "the statement that a worker-bee leaves the hive for flight on the 14th day."

It is generally understood that a bee becomes a fielder when 14 to 16 days old. On each fine day bees will be seen having a play-spell in front of the As the fielders have no need to play for exercise, will not these play-ing bees necessarily be younger than 14 to 16 days? Some years ago the writer put an imported queen in a hive with sealed brood; not a bee out of its cell except the queen, the hive being closed bee-tight. Five days later the entrance was opened, and not only did the bees fly on that day, but brought in loads of pollen! If, under stress, a bee becomes a fielder when 5 days old, is it not likely that it would normally fly for exercise at that age or younger? Has Mr. Crawshaw never watched an issuing swarm when baby bees would come out and crawl on the ground, too young to fly?

Nosema Apis Not a Menace.—At the annual conference of the Victorian Apiarists' Association, Mr. W. Laidlaw, Biologist of the Department of Agriculture, delivered an address in which he said, as reported in the Australian Park. tralasian Bee-Keeper:

During the past year I have examined over 1500 bees from all parts of the Commonwealth, chiefly for the purpose of settling the vexed question, "Does Nosema apis do any harm in the apiary?"

I find the number affected with Nosema is a trifle over 17 percent, quite a respectable percentage, but one which is not sufficient to account for the entire disappearance of a colony. Then, again, in certain districts Nosema is present to a very much greater extent than in others, and there the mortality is no larger. So far as our present knowledge of Nosema apis goes, it does not appear to be the cause of much, if any, harm, though we will not be able to say definitely until the life history of the parasite is fully known.

Is Sugar Good for Bees?—In the Brit-ish Bee Journal "A Roman Bee-Keeper" raises the question whether the great mortality caused by disease among the apiaries of British bee-keep-ers may not arise from their feeding sugar instead of honey. He says, among other things:

It is hardly likely that such an immemorial adaptation as that of honey to bees, or bees to honey, can be artificially set at naught with impunity. And who shall say what injurious effects all this artificial feeding may have on queens and their progeny, especially when it is considered that in place of their own highly-concentrated, aromatic, directly assimilable food, they are expected to put up with an insipid, watery, unpalatable, indigestible mess like sugar syrup?

Here in Italy, where, owing to the ruinous price of sugar, bees are allowed to live almost entirely on their own honey, disease of any kind is quite an exceptional condition, though now and then one hears of cases of foul brood.

The editor replies that sugar syrup is not a complete food for bees, but a substitute when they have not sufficient natural stores, and adds, "No doubt some of the diseases, more particularly dysentery, can be attributed to using beet-sugar instead of cane.'

This idea of the harmfulness of beetsugar as compared with cane has been held for years among British bee-keepers, and for as many years has been regarded on this side the water as er-It does seem strange that roneous. there can not be agreement as to this. Certainly a large part of granulated sugar is made from beets. Either it is or it is not bad for bees. It is hardly bad in England, and good here. It would be a good thing if there could be some authoritative statement based on convincing proof that would settle the question.

In a succeeding number of the same journal, Samuel Simmins comes vigorously to the defense of sugar, and says:

No statement could be more devoid of reason nor more contrary to fact. We are asked to believe that a food containing no disease germs, or at least none that are injurious to bees, is the cause of their suffering from an infectious malady that is only to be transmitted from one colony to another by the germ peculiar to that disease.

Why should the feeding of a few pounds of good sugar cause an outbreak of the malady in one apiary, when another, with ten times the number of colonies, where in dull seasons the autumn finds the owner feeding something like a ton of loaf sugar, is found to remain free from any infectious disease whatever? Why are there hundreds of apiaries where sugar-feeding is yearly resorted to, still remaining free from infectious paralysis and other complaints?

Then he cites copious proofs that disease has prevailed where little or no sugar was fed, and has been absent where sugar was used for a winter food.

It is not likely that the mortality in the Isle of Wight and contiguous regions should be charged to the account of sugar. Still it is well to heed the warning of German writers, who say that while sugar may be a good winter food it is inadequate as a food when the time comes for brood to be reared. It lacks the necessary nitrogenous elements contained in honey, and must tend toward deterioration of the nursebees and brood.

Bees as Fertilizers.-So many proofs have been given of the value of bees as fertilizers of plants that it hardly seems necessary to give more; yet a case is reported in the British Bee Journal that seems well worth recording because of its painstaking character and exactness of details. Geo. Hayes, the experimenter, thus reports:

In 1908, after transplanting for experiment some white clover into my garden, I came across a sturdy self-sown plant; so I took this rather than the transplanted root as being the better off the two. When it began to blossom I selected 3 of the most vigorous heads just before the first flower was about to open, and, after removing all small insects, I supported each on small stakes, and put a frame-work of specially-constructed wire-work over each head to give it plenty of room to develop. Over this I spread some fine-woven gauze to exclude insects from above and to admit light and air. Cot ton-wool was tied around the stalk to prevent insects from ascending to the flower; and so they grew, each flower having about 3 cubic inches of space. The plant had in all 20 flower-heads, which will show that it was very vigorous.

The 3 protected heads flowered well to the last floret, and were the first to ripen; but there was a marked difference at this stage in their peduncles compared with those of the other flowers.

When the majority of the flower-heads were ripe, I cut off the 3 which had been protected, and also 3 of those unprotected, and after cutting their stalks to equal lengths they were weighed, with the follow

ing result: The 3 unpropected heads weighed 18 grains, while the 3 protected ones weighed only 4 grains.

Here was, I considered, strong evidence in favor of clover requiring aid to fertilization. However, I went further, and allowed them to dry for a fortnight, after which they weighed as follows; 3 unprotected heads, 17 grains; 3 protected heads, 27 grains.

I next separated the seeds, and found in those unprotected: No. 1 head. 112 seeds; No. 2 head, 93 seeds. Total, 304. Average per head, 101. Weight of seeds, 8% grains. On examining the protected heads, after a long and diligent search, I was unable to find a single seed.

Value of Bees in the Orchard.—At a recent meeting of the Vermont Horticultural Society, much emphasis was made upon the keeping of bees, says an exchange. Last season was wet and cold in the spring, and not conducive to a good fruit crop, and those who have set and cared for large orchards of their own have observed that the orchands, or parts of orchards, near colonies of bees bore well, while those at a distance did not. The apple-blossom is so constructed as to render the work of bees necessary to pollenization.

This is the reason why trees bear so much better and more evenly in warm, dry seasons

One speaker said that he had about 50 colonies in and about his orchard, and his orchard bore heavily last year. which was not a good fruit-year in Vermont.

Mr. and Mrs. A. I. Root's Golden Wedding was celebrated at Medina, Ohio, Sept. 29, 1911. The anniversary dinner occurred at the home of Mr. and Mrs. J. T. Calvert. The 5 children and 9 grand-children of Mr. and Mrs. Root were all present. Full-page portraits of the honored couple appear in Gleanings in Bee Culture for Oct. 1. Judging from their youthful appearance we see no reason why they should not live to celebrate their Diamond Wedding anniversary in 1936.

The hundreds of thousands of bee-keepers all over the world will join in extending congratulations to Mr. and Mrs. Root upon their long and joyful wedded life, and wish them yet many happiness together. vears of American Bee Journal unites with all the rest in this sincere congratulation and hope.

Bee-Keeping in Cuba.-We have received the following consular reports on bee-culture and its products in Cuba, which will no doubt be read with interest by many, coming, as they do, backed with the authority of our Government:

(From Consul Max J. BAEHR, Cienfuegos.)

(From Consul Max J. Baehr, Cienfuegos.)

The most reliable authorities available give the date of the introduction of the honey-bee into Cuba as the year 1764, when the common German or black bee was brought to the island from Florida.

It is only in recent years that Italian bees have been imported into this country. So far they are considered by bee keepers as the best species both for honey and for wax. There are so many of the native apiaries that have only the German or black bees, however, that it is difficult for the owners of the Italian bees to keep them absolutely pure. The cross between the German and the Italian bees is the usual hybrid found in Cuba; and while not so gentle to handle as the pure Italians, they are usually good honey gatherers.

Exports and Production.

EXPORTS AND PRODUCTION.

In 1905 the exportation of honey from this

port to the United States amounted to \$4923, in 1906 to \$823, in 1907 to \$290, nothing in 1908 and 1909, and \$144 in 1910. Thus it can be said that since 1905 practically all honey shipped through this port was sent to Europe, and principally to the ports of Hamburg, Bremen, Amsterdam, Rotterdam, and Antwerp. The total amount exported from this section during 1908 was 68,500 gallons; 1909, 60,000 gallons; and 1910, 62,500 gallons.

These quantities, with an additional 19 percent comprise approximately the total process.

ent, comprise approximately the total production in the Cienfuegos district, as it is calculated that the local consumption does not exceed to percent.

All the honey here is collected from hives of American manufacture, and taken by extractors, also of American production.

(From Consular Agent P. B. ANDERSON, Caibarien.)

(From Consular Agent P. B. Anderson, Caibarien.)

Most of the honey sent from Caibarien is produced outside the district, coming to this port largely from along the coast eastward as far as too miles. The principal centers for honey-production are at Yaguajay, 21 miles distant; Mayajigua. 30 miles eastward; Punta Alegre, Chambas, Maron, Remedios, Vueltas. Camajuani, Zulueta, Placetas, and along the line of the Cuba Railway Company as far as Ciego de Avila and Sancti Spiritus.

The honey season is recognized as extending from November to March, inclusive, and the yield varies in quantity with the weather during these months. The hives employed are nearly all of native manufacture, from the hollowed trunks of trees, although there are in use some improved wooden hives imported from the United States. The honey is extracted from the native hives by the simple process of scraping it out; with modern hives the frames are lifted out and the honey then extracted. In the rural districts, the contents of the hives are placed in a sack or cloth through which the fluid drains. It is then put in tierces and barrels and shipped, mostly to Europe.

The season ending with March, 1010, showed shipments from Caibarien amounting to 24,000 gallons. The yield for the season ending with March, 1011, is estimated at 18,000 to 22,000 gallons of honey, and 16,000 to 18,000 pounds of wax.

There are no local dealers in hives. The small number of imported hives used are purchased in Havana.

(From Consular Agent Dean R. Wood,

(From Consular Agent DEAN R. WOOD, Nuevitas.)

(From Consular Agent DEAN R. WOOD, Nuevitas.)

Bee-keeping is extensively carried on all over this district, and forms a standard and profitable industry, particularly when given proper care and attention. Some of the native black bees are considered good workers, but experienced persons say that the Italians resist certain diseases better, and therefore are preferable. Most of the forest trees and shrubs in Cuba flower at some time of the year, and each produces its part for the beneft of the bee-keeper.

Such apparatus as is imported into Cuba, at least into this district, comes entirely from the United States, but merchants her never carry such articles in stock, and each individual orders for himself when wanted. Although a considerable quantity of the wax and honey produced in this district eventually is sent to the United States and other countries, no large part is shipped direct from this port, but is sent to Havana, and, no doubt, exported from there. During 1010 wax to the value of \$16,286, and honey worth \$1220, were exported from Nuevitas direct to the United States.

(From Consular Agent JOHN F. JOVA, Sagua la Grande.)

(From Consular Agent John F. Jova, Sagua la Grande.)

In this section there are some 780 colonies of bees, 480 of them housed in primitive native hives, and 300 in modern hives. The native hives made from a hollowed log 3 or 4 feet long, and permits of the collecting of but one crop of honey in a year, the average yield being 5 or 6 gallons of honey and 3 or 4 pounds of wax per hive. As the honey can not be selected in gathering, it brings a lower price than when the frame is used and a careful selection made. Frame hives generally yield 8 or 0 gallons of honey per year. Both the frame hives and the barrels used for shipping honey are imported from the United States.

There are no regular dealers in honey in Sagua la Grande. The trade is carried on through retail grocers (bodegueros), who forward both honey and wax to Havana. It is said that formerly shipments were made direct to the United States, but at present bee-keepers seem to prefer to deal through Havana, even at a lower price.

(From Consul R. E. HOLADAY, Santiago de Cuba.)

The value of the annual production of honey and wax in eastern Cuba ascends, under normal conditions, to the respectable sum of \$200,000, and constitutes one of the most important of the special industries for the man of small capital.

The business is confined to certain of the hill districts, and to sparsely cultivated river valleys, as the blossoms of wild plants are mainly depended upon to furnish the supply. Apiaries are found, however, on most coffee and cacao estates, as a very good, though dark, quality of honey is derived from the blossoms of these trees. An apiary is, therefore, a very valuable subsidiary asset to the coffee and cacao grower. It is a fact, however, that apiculture here is far behind the United States; due probably to the fact that few persons are engaged in the business exclusively, and to the disinclination of the natives to adopt more modern appliances for hiving and handling the bees and manipulating the crop.

ANNUAL PRODUCTION-METHODS EMPLOYED

ANNUAL PRODUCTION—METHODS EMPLOYED

No statistics are published by the State as to the annual honey-production and the value thereof. It is estimated, however, from the most reliable sources obtainable, that the production for the 1000—10 season was 250,000 gallons of honey, valued at \$100,000, and 255,000 pounds of wax worth \$66,300. The crop was considerably below the average, on account of the drouth prevailing during that year. The annual production of a colony of bees in an American hive, under normal conditions, is stated to be 20 gallons of honey, and 3½ to 4 pounds of wax, and in a native hive from 12 to 15 gallons of honey, and 3½ to 3 pounds of wax, A colony or hive of bees is worth from \$4.00 to \$4.50.

As the climatic conditions in Cuba are such that the bees work practically every day in the year, honey may be collected from the hives at any time, but two principal crops are generally realized from the industry. The spring crop usually begins with the first rains in March or April, and lasts until June or July; and the fall crop begins in September and lasts until February. Those apiculturists who use American hives are able to take honey from the hives at any time, thereby affording the bees opportunity to work advantageously and also securing considerable increase of production.

The native Cuban hive consists solely of a cedar log about 4 feet in length, hollowed out, and split through the center so that one part can be laid over the other. Usually a weight of some kind is placed over the top to hold the two pieces together, though sometimes a staple is used to accomplish this. The more progressive apiarists use extractors for separating the honey from the comb, but many of the natives use common jute-bag suspended from a vessel into which the fluid is allowed to drip while the comb remains in the bag.

The value of bee-hives imported into the island for the fiscal year 1007–8 was \$600, and for 1008-0, \$2770; the value of all other apicultural apparatus was \$507 and \$550, and for was particularl

Discontinuing Subscriptions to Bee-Papers.—Occasionally we receive a letter similar to the following:

A very poor year for me on bees. So don't send the American Bee Journal any more if you expect me to pay for it, as I can't afford it. Subscriber.

This was also a case where the subscriber was owing on his subscription for 4 months, but said nothing whatever about paying what was past due.

Of course, it is very fortunate that the publishers of any bee-paper do not receive many letters like the foregoing, for if all subscribers would do the same

way during some poor year there would soon be no bee-papers at all. It seems that some forget that the publishers can not discontinue getting out a beepaper during a poor honey season, and then start in again when a good season comes. A splendid way for bee-keepers to do would be to pay for their bee-papers several years in advance, so as to carry them over a poor season or two. It certainly is not fair to the publisher of a bee-paper to expect that it will be continued right along during both poor and good seasons, and be subscribed for only during the years when there are good honey crops. In order that the bee-keepers may have a bee-paper at all, it is necessary that its publisher shall keep it going at all times, and he, of course, can not do this unless he receives pay for subscriptions all the time.

We regret to say that there are quite a few bee-keepers who are perfectly willing to continue to receive a beepaper right along and do not seem to care whether they pay for it or not. Of course, this is not honest. The only right way to do when a bee-paper, or any other publication, is not wanted any longer is to pay up whatever subscription is past due, if any, and then request its discontinuance.

Another very important thing is overlooked by those who discontinue their subscriptions during a poor season, which is this: It may be that in the copies that they will miss there will be information that would be worth many dollars to them, and by not receiving the copy of the bee-papers regularly, they will not be able to take advantage of such valuable information. Of course, any one really interested in beekeeping, and who wishes to make the largest success of it, will not only take one bee-paper regularly, but will be many times repaid for taking all that are published in this country. There are three bee-papers in the United States—two monthly, and one semi-monthly—and all of them can be had for only \$2.50 a year. Send us that amount and we will attend to ordering the other two besides the American Bee Journal. Surely, any real bee-keeper who wishes to make the most out of his bees can find a good many times \$2.50 worth of practical information in the three bee-papers during a One can not learn too much about the business in which he wishes to succeed.

We trust that we may have the hearty co-operation of our subscribers along the line indicated in the foregoing. And permit us to repeat that, as suggested, a better way would be to pay your subscription for several years in advance at the end of a good season, and then, should a poor season come along, you could be sure that the beepaper would continue coming just the

"Fifty Years Among the Bees."—This is the new name of Dr. Miller's former book, "Forty Years Among the Bees." He has thoroughly revised it and brought it right up to date. It is published by Gleanings in Bee Culture. No doubt any one having the previous edition will be glad to have "Fifty Years

Among the Bees" also, as the new matter alone included in this latest book is well worth the price of \$1.00, for which amount the book is mailed. One having "Fifty Years Among the Bees," and also "Forty Years Among the Bees," can give the latter to some bee-keeping friend, or, perhaps, sell it at half the price of the new book.

Dr. Miller is too well known to our readers to need any introduction. What he writes on bee-keeping is thoroughly practical, resulting through his experience of 50 years' work with bees.

"Fifty Years Among the Bees," like its predecessor, is published on a royalty, so that from every copy sold to bee-keepers, Dr. Miller himself will receive a profit. So every one getting the book will be helping Dr. Miller, also. We hope that each subscriber of the American Bee Journal will get a copy of this new book. We will be glad to fill orders at the regular price of the book, which is \$1.00, postpaid, or mail it with the American Bee Journal for one year—both for \$1.75.

Minn. State Capitol and Minnehaha Falls.—On the front page this month we show two pictures that were taken the day following the meeting of the National Bee-Keepers' Association at Minneapolis, Aug. 30th and 3Ist. We mentioned, on page 296, the pleasure-trip taken by those who remained after the convention, there being between 60 and 70 in all who were in the company that went to St. Paul, Minnehaha Park and Falls, etc.

The upper picture shows a part of the State Capitol Building of Minnesota. We are sorry that all the dome does not appear, as it is very beautiful. In fact, the whole building is grand. The "woman in white," who shows so prominently on the capitol steps, is Mrs. Fred W. Muth, her smiling husband standing just back of her to the right when facing the picture.

The lower picture represents a view in Minnehaha Park. What is left of the Minnehaha Falls is shown at the upper hight-hand corner of the picture. At that time there was very little water falling, as will be seen. We understand that since then the rains have increased the flow of water, so that now it looks more natural.

The group shown in the lower picture is standing on a stone bridge some 60 or 70 feet below the surface of the ground that is on a level with the top of the Falls. It is a beautiful ravine, and the vegetation and everything connected therewith was simply bewitching.

No doubt those who were fortunate enough to be in the two companies shown can pick out their own pictures in the groups.

Mr. John C. Frohliger, of San Francisco, Calif., has been giving very interesting and instructive illustrated lectures on bees in that city. He exhibits manipulations with live bees, which are always a great attraction to any crowd of people. Mr. Frohliger has been a bee-keeper for many years in Ohio, but now represents the W. T. Falconer Mfg. Company on the Pacific

Coast. We are always glad to learn that any one is helping to educate, the public concerning bees and honey. We believe that all such exhibits and displays tend to increase the demand for honey.

Chicago - Northwestern Convention.—
The annual meeting of the ChicagoNorthwestern Bee - Keepers' Association will be held in Room L 38 of the
Great Northern Hotel, corner of Dearborn Street and Jackson Boulevard,
Chicago, Ill., Wednesday and Thursday, Dec. 6 and 7, 1911. The location
of the convention room is only two
blocks further south on Dearborn
Street than where the convention was
held last year. The Great Northern
Hotel is one of the largest and best
hotels in Chicago, and the Association
is very fortunate in being able to meet
there, for it is not only more centrally
located, but the convention room is
the best in which any meeting of beekeepers has ever been held in Chicago.

As all know who have ever attended a convention of the Chicago-Northwestern Bee-Keepers' Association, it

Association, it has good meetings, and the one next month will probably be one of the best it has ever held. Although the honey crop has been short in the States surrounding Chicago, still we believe there is sufficient interest on the part of bee-keepers, and inspiring hope for a good



crop next year, that there will be a good attendance at the coming meeting. Secretary L. C. Dadant, of Hamilton, Ill., is preparing the program, and will notify all of the members concerning the meeting. Any further information that may be desired can be had by applying to him.

The convention dates are during the International Live Stock Exposition here in Chicago, and also, we believe, during the "Land Show." There are always plenty of other attractions in Chicago at that season of the year, so that if there are any low railroad rates to be had on account of the "Land Show" or the Live Stock Exposition, the same can be secured by bee-keepers also. Apply to your local railroad agent for information concerning any low rates that may be in force at that time.

We hope that the bee-keepers in at least the States surrounding Chicago will make it a point to be present at this meeting, for there are a number of very important questions which will need careful consideration, and better results will be had through a large attendance than through a small one. Come, if possible, and help to make this next meeting of the Chicago-Northwestern Bee-Keepers' Association the best of all the year.

(Conventions continued on page 342.)



BEE-KEEPING FOR WOMEN



Conducted by MISS EMMA M. WILSON, Marengo, Ill.

Honey-Values in the Home

It is a great pleasure to a bee-keeper to find a good word for honey in the household, no matter where that word may be found, but it is especially agreeable to find it in one of our popular secular magazines. It is worth while to make an extract from an article in Suburban Life, written by Eva Ryman-Gaillard, because in Suburban Life it will do ten times as much good as if printed in all the bee-papers—perhaps a hundred times as much. It is not merely that Suburban Life has such a large circulation, but because of the class of its readers. The bee-papers class of its readers. The bee-papers are read chiefly by those who have honey to sell, while other magazines are read by prospective purchasers of honey. For every one of these last who read bee-papers, probably a thou-sand read Suburban Life. Here is the

Most suburbanites would keep a few hives of bees if honey-values were better understood. Even when the honey must be purchased, its real value is so out of proportion to its cost that it should be included among the every-day necessities.

the every-day necessities.

Comparatively few housewives use honey as a substitute for sugar in baking, but managers of large bakeries, always on the alert to find the best and most economical ingredients to use in their productions, value it at its worth, and use it in making their choicest products, because it provides a variety in flavor. It produces lighter and finer cakes, and those in which it is used have superior keeping qualities.

Honey has both food and medicinal value

have superior keeping qualities.

Honey has both food and medicinal value worth considering. Among foods, it is of the fat-heat and energy-producing class. As a medicine, it is wonderfully soothing and healing in any throat and lung affections, many physicians claiming that it is equal to cod-liver oil as a healing and tissue-building agent. It is claimed, too, that its stimulating power is nearly equal to that of good wine, with none of the wine's bad effects.

Honey for Freckles

From the beauty column of a Chicago daily comes the following:

Honey and almond paste to be spread upon the hands at night, and the hands covered with large gloves: Four ounces of almond meal, 8 ounces of oil of sweet almonds; extracted honey, 8 ounces; yolk of egg, ½ ounce. Melt the honey separately, pour the almond meal into it, and knead together with the beaten yolk of egg. Add the oil and knead again until a soft paste is formed.

Here is another from the British Bee Journal:

A good freckle cure is the following: Eight ounces of extracted honey, 2 ounces of glycerine, 2 ounces of alcohol, 6 drams of citric acid, and 15 drops of the essence of ambergris.

An Experience of Two Women Bee-Keepers

May Thirlwall thus gives in the Canadian Bee Journal the experience of two women:

In 1002, mother and I were left with about 75 colonies on our hands. When they were to be sold we thought that as we had pro-

duced our own honey for so many years we would try and keep a few colonies. Mother had helped father in every way for over 10 years, so she had the knowledge, and I was determined I would overcome my fear of them and help her. All my previous experience amounted to was knowing and telling when they swarmed; smoking them sometimes, and if one stung me drop the smoker and run.

We kept 5 colonies and an ample supply of surplus hives. We had a good honey-house, extractor, and everything to work with, and as Mr. Alpaugh said, "An ideal bee-yard."

By giving the bees plenty of surplus room:

as Mr. Alpaugh said, "An ideal bee-yard."

By giving the bees plenty of surplus room; watching queen-cells, and clipping queenswings, we have been troubled very little with swarming. We use a solar wax-extractor, so have little yellow wax. We also make honey-vinegar.

The first year (1902) we cleared \$45 from the colonies, and wintered 7. Only one colony died during 7 years, and our profits averaged between \$10 and \$70.

We traded 2 or 3 hives for more supplies, and doubled some up in the fall. In the autumn, 1908, we had 11 strong colonies. Two of these were dead, however, in the spring of 1900, but we made \$100 clear, and put 13 colonies away in October.

We have no trouble in selling our honey.

We have no trouble in selling our honey, as we always try to produce an AI quality-Customers come to the house for it, and many orders reach us after it is all sold. We extract the dandelion before the clover begins, and do not mix the last in the fall with the basswood, but sell it at a much lower price.

price.
Keeping bees is not all pleasure or profit. It means a lot of hard work, but I do not see why it is not a suitable occupation for women. I think two can manage better than one, as the hives are often heavy to lift. We have had all the honey we wanted for ourselves, and made a little pin money.

A Make-Believe Bee

Lady Henry Somerset tells how her attention was first called to the work of relieving the sufferings of poor city

children:

"It was this way," she said. "I was moved in that direction by the rare patience and imagination of one little boy. His example convinced me that patience was one of the qualities I needed most, and in seeking it I grew into that work. I was in a hospital on visiting day, while the doctors were changing a plaster cast which held a crippled boy's limb. The operation was exceedingly painful, I was told. To exceedingly painful, I was told. To my surprise, the little sufferer neither stirred nor winced, but made a curious buzzing sound with his mouth. After buzzing sound with him: How the doctors left I said to him: How could you possibly stand it?" 'That's nothin',' he answered; 'why, I just made believe that a bee was stingin' me. Bees don't hurt very much, you know. And I kept buzzin' because I was afraid I'd forget about it's being a bee if I didn't."—Selected.

Bees Making "Calico" Combs

As I had no wood cover for the super on the hive, I covered the sections in the super with a piece of clean black calico. Imagine my astonishment when in a few weeks I examined that hive to find that the bees had literally eaten up that black cloth and made it into combs for sections, and was rapidly filling the combs with honey. I am sure

they mixed it with the wax in some way, for the honey-comb was a beautiful black, and the cloth eaten up. Ohio Bee-Woman.

Something of the same kind has occurred here. Black oilcloth was over the sections, and the black was worked into the cappings, but into the cappings only. It seems that the bees work into the cappings bits of pollen or anything easily within reach. That is the reason it will not do to have sections too near the brood-combs, for, if too near, the surface of the sections will be darkened by particles of the brood-combs mixed with the cappings.

Summer and Bees

Have you seen the meadows glowing with the clover all a-bloom?
Have you smelled its fragrance blowing thro' the balmy month of June?
Have you heard the bees a-humming thro' the long and sunny days?
Have you seen their wings a-flashing in a busy, busy maze?

Have you watched them coming in like a cloud from out the field,
Laden with the choicest sweetness that the blossoms ever yield?
Have you listened in the moonlight to their deep, persistent hum?
Have you felt your pulses quicken with the harvest that's to come?

Have you peeped into the hive when the combs are growing white?
Have you seen the rich drops glisten as you hold them to the light?
Have you weighted up a super when it almost broke your back?
And placed an "empty" underneath for those busy bees to pack?

Have you heard the mad vibration of a myriad wings in air,
Which tells you very truly that a swarm is surely there.
In a high old orchard tree seen them cluster, rich and brown?
Have you climbed a wobbly ladder and brought it safely down?

Have you seen the basswood laden with its sweetly scented flowers,
Which the bees have come to rifle thro' all the daylight hours?
For there's nothing in this world tempts the bees so far a-field,
As those clustering pearly blossoms with their precious sweets unsealed.

Have you carried in the heavy combs all ready to extract,
And seen the white wax crinkle up at the uncapping-knife's impact?
Have you filled up with the honey the pails so bright and clean,
And sent it to the markets—a food fit for a queen?

If you have, you've learned a secret from the golden summer days,
Which takes you close to Nature's heart and teaches of her ways;
For the heart of all the summer is the humming of the bees
In the fragrant clover blossoms and the whispering basswood trees.

The foregoing poem was written by Miss Ethel Robson, the able conductor of the "Woman's Department" in the Canadian Bee Journal. To her various interrogations, we of this region must sadly answer, "Well, no; not this year."

Two Honey-Cake Recipes

Honey Layer Cake.—One cupful of honey, ¼ of a cupful of butter, 3 eggs, ½ a cupful of milk, 2 cupfuls of flour, and 11/2 teaspoonfuls of baking powder. Cream the butter and honey together, add the eggs well beaten, and the milk flour and baking powder. Mix well and bake in two jelly-tins. When the

American Bee Journal American Bee

cakes are cold take finely flavored candied honey, and after creaming it spread it between the layers. Cover with white frosting and decorate with orange and almonds. Make frosting by beating the whites of 2 eggs, juice of one lemon, and enough confectioners' sugar to thicken.

HONEY-CAKES.—Put 2 heaping tablespoonfuls of butter into a saucepan over the fire, and when melted stir in ½ pound of honey. Remove from the fire, and when cool mix with it the grated rind of half a lemon, 2 heaping tablespoonfuls of chopped almonds, ½ a teaspoonful of grated nutmeg, 2 cupfuls of flour, and one level tablespoonful of soda dissolved in a small quantity of warm water. Leave the mixture in a cool place for 12 hours; then roll it out ½ an inch thick, cut it into round cakes, and decorate with shredded almonds. Bake in a moderate oven for 20 minutes.—Ladies' Home Journal.

pictures, cheap lace curtains (perhaps with holes in them); an organ in a corner. There may be a spare room with a marble-top washstand, and a red or blue rag carpet on the floor. On the wall hangs the marriage certificate, a "God Bless Our Home," and a "spotknocked" enlargement from a tin-type of Uncle Ebenezer or Aunt Samantha. They have hot biscuits, fried eggs, and coffee, for breakfast.

Now, the bee-man may have a crop of 5000 pounds of extracted honey; he sells it for 6 cents a pound, and it brings him \$300; but he has to pay \$50 for cans, and as much more for other supplies. Can a man with a family live on this? Perhaps not; but I know some who do, with what they get from the garden, chickens, cow, etc.

Fifteen cents a pound would bring this man \$750.00 for his crop, and it is worth it, every bit. This would mean music lessons for the girls; a slide trombone for the boy; a chance for the girl at the Normal, or a term in the manual training school for the aspiring boy. You need not tell me that a fairer remuneration for labor would not mean greater life to the masses of the people. I think it would be well to remember the moral aspects of this endeavor for better prices in honey. The price tends upwards now—let us do our best to aid the betterment all along the line.

There is another side to this, and that is, that the average bee-keeper, farmer, fruit-grower, etc., does not have a plan on a large enough scale. He thinks in terms of hives instead of apiaries. He is mastered by fear of failure. Let us strive to usher in better bee-keeping, and better prices for our honey. It will mean happier homes, and more smiles and kindness all around.

FAR WESTERN BEE-KEEPING

Conducted by WESLEY FOSTER, Boulder, Colo.

Prices of Colorado Honey

Comb honey is selling for \$2.75 to \$3.25 per case for No. 1 white, and \$2.40 to \$2.90 for No. 2 honey. No. 1 light amber brings about 15 cents a case less than the No. 1 white. I do not know of any No. 1 white honey packed in single-tier cases bringing over \$3.00 a case, while several cars of honey packed in double-tier cases have sold for \$3.25 for the No. 1 white, and \$3.10 for the No. 1 light amber. At the present prices I think there is more money in comb honey than in extracted at 6 cents to 7½ cents per pound.

Foul Brood Treatment in the Fall

It has been repeatedly recommended to carry over colonies with but a few cells of foul brood until the following spring for treatment. That may be a safe procedure for some localities, but here in the arid country the bees breed quite heavily during October and all through the winter. I have seen colonies with but a half-dozen cells of disease in late August, and in October 2 to 4 combs rotten with the disease. It can not be recommended to try and carry over diseased colonies—better treat them and give clean combs of honey for them to winter upon.

Bees Killed by Smoke

Mr. R. W. Ensley, of Delta Co., Colo., tells me that he killed a colony of bees with the smoke from a black cloth (part of an old dress). He thinks it was the dye in the cloth that killed the bees.

The Average Small Bee-Keeper

The average small bee-keeper keeps bees as a sort of gambling proposition. All the bee-work is summed up in putting on and pulling off the top boxes, and trying to catch the swarms when they appear. He thinks that if he can get a little honey it is so much "easy money." This may "go" in some places, but where foul brood is rampant it is a losing proposition for the average bee-keeper, and a very costly one for the large bee-keeper who has bees near by.

It can not be too strongly empha sized either to keep bees, or sell out to some one who can. This should not discourage the careful amateur, as I know many a small bee-keeper who is as up-to-date and well-informed as

many a specialist.

In my work of inspection it is common to find some elderly man with 30 or 40 colonies, and foul brood in many of them—his bees are all right; there never has been anything wrong with them—but he has had "bad luck" the last few years—the yellow-jackets killed many of his colonies, and the ants got many of the others. If you suggest disease—oh, no! never any disease got into his yard! He has no use for these new scientific ideas, anyway. Then, perhaps, he will launch into a tirade against the whole theory of germs as the cause of certain diseases. But a younger member of the family reads the bulletins and papers, and takes charge, transfers into modern hives, and soon we have a progressive beekeeper.

When I meet one of these old fellows, that knows more about bees than all the rest, I do not lose hope until I find he has no children or grand-

children.

Sugar and Honey Prices

At the present price of sugar, which is right around 9 cents a pound, it seems the bee-keepers would have a good chance to increase the consumption of honey through advertising. Honey at the same price as sugar should go like the proverbial hot-cakes, for which honey was intended, anyway. It is, however, a fact that sugar is selling at \$9.00 a hundred-pound sack, and honey at 6 cents a pound for extracted in a good many towns in Colorado. This is a strange condition, and it will not obtain for a very long time.

Honey-Prices and Home Comforts

I know a good many bee-men—and they are pretty much like other folks—most of whom do not have very many luxuries; their houses are small and families large. In the kitchen is a cupboard, stove, table, and a few wood chairs. In the dining-room are a few

"Langstroth on the Honey-Bee"

This is one of the standard books on bees. It tells in a simple, concise manner just how to keep bees. It was originally written by Rev. L. L. Langstroth, who invented the movable-frame hive in 1851. The book has been brought right down to date by Dadant & Sons, than who there are no better or more practical bee-keepers in this or any other country. It contains nearly 600 pages, is fully illustrated, and is bound in cloth. Every topic is clearly and thoroughly explained, so that by following its instructions no one should fail to be successful with bees. Price, postpaid, \$1.20; or with the American Bee Journal one year—both for \$2.00. Send all orders to the American Bee Journal.

"Scientific Queen-Rearing"

No other book compares with this one written by Mr. G. M. Doolittle. He is an expert in the business. It tells just how the very best queens can be reared. Bound in cloth. By mail, \$1.00; or with the American Bee Journal, one year—both for \$1.60. In leatherette binding, 75 cents, postpaid; or with the American Bee Journal one year—both for \$1.25. Send to the American Bee Journal.

SOUTHERN



BEEDOM~

Conducted by Louis H. Scholl, New Braunfels, Tex.

Experimental Apiculture Fascinating

There is something fascinating about experimenting, to the average enthusiast, and the writer is one that is not lacking in this direction. The consequent result is that there is always more or less experimental work going on in our extensive bee-keeping business, and we have long ago found that this is but a step in the right direction, and gives us the advantage of ascer-taining for ourselves methods that are the best applicable to our manner of managing a large establishment of numerous apiaries as ours is at this Yea, more than that-it enables us to increase our business from year to year, as we gain more experience, and this is quite in accord with the motto, "Keep More Bees," that is tacked up in our mind.

Right along the line of the above it might be of some interest to the readers to learn that we have established a series of apiaries in such a way that we can leave New Braunfels in the early morning for a pleasant drive from one apiary to another, travel 24 miles, and visit 8 different apiaries on the round, and at the same time study the difference and the habits and value of 8 different races of bees, then arrive at home again by noon to enjoy our mid-day meal.

The home-yard, consisting of 30 colonies at this time, known as the "Comal Apiary," because it is located near the banks of a creek by that name, is stocked with Caucasian bees-the gentle race that attracted so much attention at one time, but which race did not become very popular except with a few bee-keepers who claim a good deal for them. There may be something in different strains of this race, and this is one reason why we will give them a thorough trial in this yard. The main reason for having the Caucasians in one of these yards, is that visitors who come here to study bee-keeping matters, of which we have many throughout the year, may see the various races.

Two and one-half miles from the city is located the "Ickels Apiary," which is our Holy Land apiary. Here the bees our Holy Land apiary. Here the bees that are not very popular with many bee-keepers will be kept in their purity. We have had these bees for about 15 years, find them good honey-gatherers, excellent comb-builders, and the queens are very prolific; therefore, the colonies are always strong, which accounts for large yields of honey being stored by them. But their nervous disposition and consequent irritability and stinging habit make them very dis-agreeable to handle; besides, they do not cap their honey-comb satisfactorily for comb-honey production, placing the cappings right on the honey in such a way that the combs have a very watery appearance.

The third apiary, is the Weidner Apiary," 4 miles away, where nothing but the 3-banded Italian bees are kept. This old race, that has been found by the majority of the bee-keepers as the best all-purpose race of bees, has always been recommended by us, not only to beginners, but to all persons who have asked us for advice regard-ing the various races of bees. They are gentle, good honey-gatherers, defend their hives well, and are an allaround good race of bees.

There are 50 colonies in each of the last two mentioned apiaries—the num-ber that we have found is the best number to keep in one yard in our locality, with the honey-flora and other

conditions that exist here.

The "Nuhn Yard," with 82 colonies, is 9 miles from New Braunfels, and consists of Golden Italians. These bees do not seem to be as hardy a race as the 3-banded Italians, but they are very good honey-gatha very good point in favor of comb-honey production. Since much inhoney production. Since much increase was made at this yard after the honey-flows were over, it happens that there are 32 colonies above the regular number at this place now, but which will be moved to a new location in the winter to establish another apiary 3 miles from this yard. The new yard will be the "Marion Apiary," 11 miles from home, where we will establish our sub-headquarters next year, Marion being a town on another trunk railway. From here a dozen apiaries will be managed by a manager who resides at this place permanently, thus taking a load off the New Braunfels headquarters that has become quite an obstacle in out-apiary management with us. In other words, all the apiaries in that direction, and over 7 miles from New Braunfels, will fall to the Marion head-quarters. It required a good deal of extra travel and unnecessary hauling to manage these apiaries at the long range, as we have had to do heretofore under the old management.

Turning back from Marion in another direction, we come by the "Santa Clara Apiary," at the head of a creek by that name, where there are over 50 colonies of Banat bees. This race has not been tried extensively by the writer, so that we do not know much to report on them. But from the breeders from which we obtained our stock for this yard, we have many words of praise for this race. Another season we may be able to make a good report on them also.

The "Soms Apiary" is one with the gentle Carniolan bees-a race that we have had in our yards for a dozen We like them for their large vears. size, their gentleness, their prolificness, and their way of capping the comb honey very white. We really do not admire their black color, and especially so when we wish to find the queens, as these are somewhat harder to find than the vellow queens of other races. This. of course, does not apply to those who handle them very much, and thus become used to finding these dark queens, we presume. Another objection is their inclination to swarm, which is a serious factor in out-apiary manage-ment; however, we have not had very much trouble in that respect with the large hives we use, and the manner of hive-manipulation that we employ just before and during the swarming sea-

Coming still closer home, 2½ miles west of the city, we arrive at our "Queen-Rearing Yard," established last year for the sole purpose of rearing our own queens for our many apiaries. This yard was stocked with all the best breeding queens that we could obtain, of the 3-banded Italian race. Our queenrearing work was very successful for a time last spring, and our first lots of queens were beautiful ones, and all purely mated, since there were no other bees around in that neighborhood. But it happened that the yery next neighbor, on the adjoining farm, caught the bee-fever from across the fence, and lo, and behold! within 2 months he was well supplied with more than a dozen colonies of all varieties of bees except any pure Italians or any other race that was in its purity.

That put a stop to our pure mating, and being impracticable to Italianize his bees, besides deciding that we would not continue to rear queens in this yard, we have changed them to the Cyprian race. This race is too wellknown to need further description here, but we have tried them for a dozen years or more, and know that they are the worst stingers we have ever had in our yards. It may, therefore, be one reason why we placed these bees in the yard at this place, so near to the person we think has intruded upon our rights (?), knowing that the cross-mated stock that will follow naturally in any neighboring apiaries (?) is still harder to handle than the race in its purity!

This brings up the question again regarding the priority rights of a beekeeper in a certain locality. In our case, we were the first to place an apiary in a location where nobody had ever thought of going into the bee-business. Then comes the neighbor and con-tracts the bee-fever; owns the land next to the place where we have rented the ground for our own apiary, and plants his apiary. What is going to keep him from doing so on his own land? Or what is going to help me to go there and keep him from doing so on his own land? Those are questions that we would like to have some of the "priority-rights people" answer

But such is a story of the location of 8 of our apiaries, with as many different races of bees, in such a way that they can be visited in half a day's drive. Any of these yards can be reached within a short time, as the farthest is only 11 miles away, while the others range all the way from 21/2 to 4, 7 and



Conducted by J. L. BYER, Mt. Joy, Ontario.

Rare October Weather—Late Brood-Rearing

"What so rare as a day in June?" With considerable emphasis could the quotation be used at the present, by simply substituting the word "October" for "June." The latter half of September was cold and dreary, and not at all weather that the bee-keeper likes during the time that the bees are being fed up for winter, yet in our own case that work was all done by the first of October. During the past 10 days the weather has been simply ideal, and if we had known how things were going to turn out of course feeding would have been delayed for a week or so.

The rains of the latter end of September, followed by the present warm weather, caused an unusual amount of dandelion to come in bloom for this time of year, and we have the unusual experience of seeing the bees carrying in pollen from this source in the middle of October. When feeding was started, about Sept. 20, very little brood was in evidence in any of the hives, many colonies having none at all. Since the fresh pollen has come in, I find that most of the colonies are doing quite a lot of brood-rearing, and I am not at all sure that this factor will be of any benefit so far as it affects the wintering of the bees.

October 14th I received a few queens, and in hunting out a couple of old queens, my attention was called to the amount of brood-rearing going on. My curiosity caused me to look into a number of colonies, and in every case there was brood in about 3 combs, the circles averaging about 4 inches in diameter. The colonies are very heavy in stores, else no doubt there would be still more brood. In a few cases I noticed fresh pollen in one comb to the extent of about 4 inches or so in diameter.

To my mind there is no question but what this fresh pollen coming in so late in the season, is responsible for the late brood-rearing going on, and I shall watch with interest as to what the effect on wintering will be. In all the hives examined, eggs were being laid freely, and that means that quite likely a number of young bees will go into winter quarters without having had a winter flight. Those going into the cellar will thus have young bees in the hives that have never had a flight, and can not possibly have one for at least 4 months or more.

The Ontario Convention, Nov. 15-17

The annual convention of the Ontario Bee-Keepers' Association will be held in Toronto Nov. 15, 16, and 17, 1911. Judging from what I have learned, the proposed program of the convention promises to be a record-breaker

in many respects. Among the features that look attractive, is an address by Inspector Charles Stewart, of New York State, one of the veterans in the foul-brood work, and a man known as a hustler by all who have come in con-E. B. Tyrrell, Secretary tact with him. of the National Association and Editor of the Bee-Keepers' Review, will also be there and talk along the line of cooperation so far as the principle can be applied to the benefit of bee-keepers in general. Dr. E. F. Phillips, of Washington, D. C., is billed for two addresses, each of which will be illustrated by lantern views, if I am correct. Many well-known bee-keepers on this side of the line will be in attendance, and in addition to the few mentioned from the other side, of course we look for a great many others to be present, too.

There will be single fares on the railways from all points in Ontario, as the Horticultural Show will be in progress at the time of the convention.

The writer is certainly looking forward with pleasure towards having a profitable time, both from a business standpoint as well as the social side, and I have no doubt but that many others are feeling much the same. On behalf of the Ontario Association I feel that I am but voicing their sentiments when I extend a hearty invitation to as many of our neighbors "over the line" as can possibly do so, to come and have a good time with us, and at the same time see that Canada produces other things besides icicles. A visit to the Horticultural Show, which I have mentioned, will go a long way towards proving the latter claim.

Amount of Sugar as Substitute for Winter Honey-Shortage

On page 293, considerable space is devoted to discussing how much sugar should be given to make up a stated deficiency in natural stores in a colony of bees. The summing up of the discussion is about as follows: Give five-sevenths of a pound of sugar to every pound of shortage, no matter what the strength of the syrup.

A few years ago I was pretty much in line with that view, and I remember distinctly of having a spirited argument with Mr. John Newton, of Thamesford, Ont., when he contended that it took a full pound of sugar to equal a pound of honey so far as providing winter stores for bees was concerned. Mr. Sibbald, at the time, sided with me, when I contended that the estimate was too high, as at that time I thought that about the proportion given in the item I am referring to, was about right.

While I don't know whether Mr. Sibbald has changed his views on the matter during recent years, I certainly have changed mine, as, after careful experimenting and watching results in a number of years, I am now of the opinion that the claim made by Mr. Newton was correct. At any rate, when I find a colony that is 10 pounds short of what I want it to be, that colony gets 15 pounds of syrup made on a basis of 2 pounds of sugar to one of water. By comparing colonies thus prepared with others that had enough natural stores, I find that it works out about equal. No question but that for a short time after feeding the colony given the 15 pounds of syrup will outweigh the one that had enough natural stores, but in the month of April the difference will not be apparent.

Stimulating the Queen in Early Spring

I have read with much interest what Wesley Foster says, on page 269, about the matter of stimulating the queen to lay in the early spring, by spreading brood and uncapping honey. I suppose he knows what he is talking about for his "locality;" but, my! I wouldn't want to play that game with my bees here in Ontario. He admits that much brood is chilled even in his locality by the methods he employs, yet thinks that he is the gainer in the end.

After considerable study and experience, I have come to the conclusion that, nine times out of ten, the queen will lay all the eggs the bees can take care of in the early spring, and that any so-called stimulating at that time is apt to act like a boomerang. Please understand that I am speaking of Ontario, and not of Colorado. At the same time it would take a good deal of courage on my part to get me started to play the game even if I moved to Colorado.

Imperfections of Bee-Keepers

On page 302, Mr. Wilder bewails his imperfection as a bee-keeper, and, to tell the truth, I am a bit out of patience with him for talking like that. The perfect man, be he a bee-keeper or follower of any other business, is a rara avis indeed, and if such a man existed and was aware of his perfection, he would at once be spoiled by getting a "big head."

If the writer of these notes were to begin to think of his imperfections, the chances are that he would go out of bee-keeping or any other business he might be engaged in; but knowing the frailties of human nature he keeps plugging away, making blunders innumerable, almost every day of his life.

It is generally understood that a beekeeper is, as a matter of course, a good mechanic as well, but in my case I have a positive dislike towards handling tools, and scarcely ever try to make anything in the line of hives, frames, etc., that go in line with an apiary. Some time ago a certain writer in the American Bee Journal said that unless a man was handy in the line suggested, he should not engage in bee-keeping, and, incidentally, insinuated that he had no business to be in that particular calling. Without taking time to look up the item, I remember having replied in substance that it was none of his business how other

bee-keepers were qualified in other branches, so long as said bee-keepers lived straight enough to keep out of jail and did their lawful duties as citizens of the land. No, Mr. Wilder, no matter what you think of yourself, the rest of us think you are all right, so please do not belittle yourself any more in the future.

Say, I am right with you, though, on that vacation business, and would like to go visiting with you. Only if there happened to be some fishing near our travels you certainly would lose me unless you went angling, too, as I always "go fishing" when I get tired and want a change of scenery.

Alfalfa in the East and in Canada

Gleanings in Bee Culture reports that in New York State, in the vicinity

of Syracuse, alfalfa yielded honey very rapidly this season, It would be inter-esting to know just how the weather conditions were at that time, as possibly it may yield heavy here some time. Mr. Holtermann, of Brantford, reported that it yielded best with him during a season when much rain was in evidence, while, on the contrary, the only time it ever did anything here was at a time of pretty severe drouth.

This season the alfalfa simply turned yellow with the heat and drouth, and I doubt if a drop of honey was gathered from it. As the acreage is rapidly increasing each year, it would be very gratifying indeed if alfalfa could be-come a honey-plant to be depended upon. However, the farmers cut it be-fore it blooms very much, so quite likely it will never be a honey-plant of importance in our section of country.

secured by our Government. I applied at once for foundation stock, which I obtained, and since I have installed it the bad situation has been entirely removed, and I have been able to rear more queens and bees than I could have reared with the Italian stock, and have been able to operate more apiaries and do a larger bee-business than I could ever have done with the yellow race of bees. I have tried both races faithfully, and I know what I am talk-ing about when I express myself as I do relative to the Caucasian bees, and crosses with them.

It is perfectly natural for us all to love the "beautiful yellow bees," and I find that it greatly improves the Cau-casian bees to give them a light dash of the "yellow" blood. They don't propolize so badly and build so many bur and brace combs, which is the greatest objection to the Caucasian

Now, I don't advise doing away with our "yellow" blood entirely, but let us try a heavy dash of the Caucasian blood. if we are not satisfied with the yellow stock. No reports have come in it does not make an improvement. No reports have come in that

It might be said that I have not had much experience with Italian bees, and have never compared them thoroughly side by side. I have 9 apiaries of Italian bees located in a section of country where the wild bees in the forest for miles around are pure Italians (such conditions do not exist any-where else in the United States, perhaps), and the Caucasian blood makes an improvement there.

Now about the poor queens you have been buying. If half of the queens you have been buying prove to be good ones, as you state they are, I don't think you should "kick." Considering the damage done to queens through the mail, and the present prevailing prices of queens, a queen-breeder can't rear choice queens to fill orders with, for 50, 65, or 75 cents each, or even at \$1.00 each, and expect to live thereby.

Every bee-keeper who is familiar with the rearing of queens, knows that we get only a small percent of choice queens out of each batch of cells, and we can not pinch the heads off of the others and fill orders with the choice No. the queens at the very low prices. No, the orders have to be filled with these queens, taking them as they come, and we can afford only now and to pinch the head from a very inferior one. So you see, dear bee-keeper, how orders are filled for "cheap" queens. Then they have to be bumped and jarred in the mail, and perhaps remain for several days in a half-smothered condition in a mail-sack—all of which is very detrimental, or straining on the tender and delicate organs of the queen. So by the time she reaches you, you have a cheap queen for which you have paid a frivolous amount.

Allow me to relate an incident right here that will throw some light on the subject of rearing and buying queens. A bee-keeper friend of mine wrote me once that he wanted to start a small out-apiary, and he wanted 12 of the best queens I had or could rear for the foundation stock. I had been saving some very choice queens, and I wrote



Conducted by J. J. WILDER, Cordele, Ga.

Death of Mr. R. W. Herlong

It is with regret that I announce the death of R. W. Herlong, of Fort White, Fla., which occurred Oct. 11, 1911. He was sick only 5 or 6 days, and his death was not expected, for up to that time he was in his usual good health, working in his apiaries and packing houses, removing, packing and shipping his fall crop of honey, for, as the Dixie beekeepers know, he was one of our most extensive and best bee-keepers.

Fuller particulars will appear next

Good Management, Supplies and Stock

MR. WILDER:—I am surprised beyond my expectation in the amount of honey and the difference in better management and better stock of bees. This is all we need here to harvest great crops of honey, and make money at bee-keeping. From the honey-flow from cotton alone I harvested 10,000 pounds of light-colored, fine-flavored honey.

If my county was properly stocked with the best bees, and well managed, we would ship out several car-loads of honey each season. Those around me are questioning me no little about my improved bees, hives, methods, etc. I had a letter from T. S. Hall, of Pickens county (this State), a few days ago, saying that his bees were "rolling in the honey."

Bogart, Ga., Sept. 22

On the brows and summits of the "red hills" of North Georgia, near Athens, will be found a large number of neat modern apiaries owned and operated by Mr. Cash. He buys the best of supplies and uses full sheets of comb foundation, and of late has put in a stock of good bees, and his letter above explains itself. But allow me to say that Mr. Cash rears his own queens from the best stock obtainable. But he is located in a section that is far below an average for honey-production.

Good supplies, good stock, and good management will cure any first-class case of dissatisfaction in bee-keeping. I wonder if any reader needs the remedy.

Dissatisfied With the Yellow Bees

I see from the bee-publications that the Italian bees have not given you satisfaction, and you have fallen upon something better in a darker variety known as Caucasians. Well, I have never been satisfied with these yellow bees, either, the queens of which I have been getting from the queen-breeders. I have bought yellow queens from almost all the queen-breeders of the United States, and just about half of them proved to be good queens.

all the queen-breeders of the United States, and just about half of them proved to be good queens.

The yellow bees are too tender for the bee-keepers who are so far north as I am. Winters are too severe and long. I believe the bees you have would prove better for Canada. I notice that you say that you are not a queen-breeder, and do not expect to be. If I can't get better queens than I have been buying from breeders. I am going at the "queen job" myself. Ont., Canada.

I have never been satisfied with any race or strain of bees, because they all have more or less bad traits, and the Italians had too many to be anywhere near satisfactory, and this put me on the alert for something better.

One of the bad traits of the Italians is, that at times they will seemingly, and without a cause, get very furious or angry, and this made conditions very bad at my home apiary, located in town, where I was going to rear all my queens and most of my bees for an ex-tensive bee-business. At these times they would sting passing objects along the near-by highway, and enter nearby houses and sting my neighbors sitting on their verandas, and sometimes enter their rooms and sting them: and at times they would storm the town for sweets, and give the druggist no little trouble. The situation was so bad that I regretted that I ever bought any Italian queens, and the town made a "kick," and the city authorities no-tified me that I would have to move my bees

This, indeed, was discouraging to me, and the "air castles" which had made their appearance, relative to my future bee-business, had almost van ished, when the news reached me that a "gentle" variety of bees had been

him that I could fill the orders, and made him a price on the queens. He replied that it was far more than he had been paying for queens, but he enclosed a check for the amount and wrote me to mail them, which I did, and they arrived in good condition, and he was successful in introducing them. I knew well that he could not judge good queens, although he had handled lots of them, but he wrote me that they were the finest queens he ever saw, and every now and then he would write and compliment me on those queens.

Some 4 or 5 years afterwards he wrote that the average was twice as much in that yard as in others, that he had made a great amount of increase from it, etc., and that he had had nearly failures at all the other yards, but he

had every season secured a good crop of honey there, and wanted to buy enough of such queens to head all his colonies. I wrote him that I was under no obligation to sell queens now, and I had none to offer.

I don't know whether the Caucasian bees will winter well in the cellar or not, as I haven't had any reports.

No, I am not a commercial queen-breeder, and will never enter the field at the prevailing prices of queens. I can far better sustain life at honey-production. But it takes good stock and a lot of queen-rearing to make honey-production pay, and if every honey-producer will go at the "queen job," and buy only a few good queens as he goes along, and quit buying "cheap" ones, he will prosper more in the bee and honey business.

case the entrance becomes stopped by ice or litter.

Otherwise it is well to keep the entrances well shaded, so that the bright sunshine will not induce them to sally forth too early for their safety.

If during a very bright and warm day they still will come out in large numbers, while snow is still on the ground, a sprinkling of straw or waste hay in front of the hives will save many, as they will prefer to alight on it rather than the snow, and then nearly all get back safely without becoming chilled.

If the hives are not in a naturally sheltered location, it is well to protect them from the winds by standing some corn-fodder or straw against the north and west sides to act as a wind-break.

But, however you may manage, if you use all your ingenuity to keep the bees dry, as well as warm, they will seldom suffer from cold.

Factoryville, Pa.

CONTRIBUTED



ARTICLES-

Successful Wintering of Bees

BY ISAAC F. TILLINGHAST.

To carry the bees over winter successfully in our climate is one of the most serious problems which the beekeeper has to solve, yet there are rarely more than two general causes for their loss. These are, first, lack of food, and, second, a surplus of moisture, both of which the alert bee-keeper will readily overcome.

It is really quite surprising how much cold weather a colony of bees will stand if kept dry, and, on the other hand, it requires not very severe freezing to prove fatal to them if water is allowed to work in, or if not packed so that the natural accumulation of moisture can escape by a kind of ventilation which at the same time will retain their bodily heat.

There is no doubt but those who have a properly constructed cellar, well drained and ventilated, and with a dry concrete floor, can winter their bees with greater safety and less expense, or less consumption of food, than can be done out-of-doors, but as most cellars are arranged they are far too moist, and the bees are usually better off in the open air.

In our climate we usually have days every month in winter when it is warm and pleasant enough for the bees to take a good flight, and my experience has shown that they keep in better health and suffer less from "spring dwindling" than where confined for 4 or 5 months as they frequently are in cellar wintering. So for a number of years past I have practised packing them for winter on the summer stands, an operation which I accomplish about as follows:

The oil-cloth which is kept on top of the frames when the surplus supers and sections are not on, is doubled over to the front, leaving the back half of the frames exposed. Then in the center of this uncovered space I invert a wooden butter-dish (such as your

grocer gives you as a part of a pound of butter), extending it crosswise of the hive, to cover as many frames as possible; and then fit an empty super on the hive as tightly as possible so that no water can be driven in.

This makes a clustering-place for nearly a quart of bees, where they can retain their bodily heat, and keep warm and snug in the coldest weather, and also be enabled to reach their stores of honey below by passing over the tops of the frames. It also prevents the few bees from becoming detached from the main cluster and getting caught between two combs and perishing, as they otherwise sometimes do in sudden snaps of very severe weather.

Next, over this half of the hive, and over the inverted dish, I place a piece of old coarse carpet, or gunny-sack will answer, tucking it down carefully around the edges, and then fill the super with dry wheat or oats chaff.

Now carefully fit on the cover, and if there is any possibility of its leaking rain or snow water cover it with a piece of roofing, being sure that there is no place for water to work in, either.

Then raise the rear end of the whole hive at least 2 inches, letting it rest upon a couple of bricks or stones so that rain or melting snow will speedily run away from the entrance, and not work in so as to clog it or keep the bottom-board wet.

When thus fixed there is but one more source of loss to contend with. We are liable to have many warm, sunny days towards spring which will induce the bees to come out in large numbers while snow is still on the ground, on which many will alight, become chilled, and never return to the hive

If the bee-keeper has empty supers to spare, it is a good plan to place one under each hive, which puts the bees so far from the entrance that they are not so quickly incited to emerge on account of a little sunshine, and gives air enough to prevent suffocation in

Foul Brood and the Inspectors

BY E. M. GIBSON.

It has come to the breaking point with me, and I am going to write some truths about foul brood, and if some one's feelings are hurt, I hope others may be benefited.

There is not the slimsiest thread of consistency in keeping foul brood year after year to menace those who keep their apiaries clean. One would not be allowed to keep any other infectious disease in a neighborhood—why foul brood? We hear of bee-keepers whose bees get the disease, but that is the last we hear about it—they get rid of it without an inspector having to come and make them do so. Nearly every issue of our bee-papers has one or more articles about foul brood and its cure, and I believe a great majority of them ought never to have been published. If I were inspector I would be lenient with the beginner, but the old transgressor would have to "get busy" and clean up.

In the first place, I would see to it that every owner of bees received a circular explaining the McEvoy treatment, and giving explicit instructions about being careful in the manipulation of the same. The McEvoy treatment will cure foul brood, either American or European. When I refer to the McEvoy treatment it is to be understood that I mean with starters or with whole sheets of foundation. I used full sheets, and if I had used only that treatment instead of trying everything else I had read about, I would have gotten rid of it one year sooner than I did. If there is a sure cure for foul brood, why not confine one's self to that process?

There need be no trouble about diagnosing the disease; the rawest beginner would not be misled, for if his eyesight failed, and his olfactory nerve was in tune, he could make no mistake.

Some districts of the inspectors are so large that it is impossible for them to do all the work, and the law in this State does not require them to do so. The owners of bees should be instructed as to the method of cure, and

then it is the duty of the inspector to see that instructions are followed.

Are some of our inspectors too lenient with old offenders? It is not for me to judge, but I have read in the bee-papers that foul brood is on the increase in some of their districts. There is such a thing as being overzealous to do justice to a few that injustice may be done to others.

The year 1904 was the poorest season I have ever known. I fed my bees from May, 1904, to May, 1905. Honey being the natural food for bees, and never having heard of foul brood in this section, I bought honey to feed them. I afterwards learned that the honey I had fed was taken from an apiary that had foul brood, and had been broken up, the honey extracted and sold to the merchant from whom I bought. Imagine the condition the bees were in by 1905! Several told me it was impossible ever to cure such a mess, but I produced 17 tons of honey that year, and nearly all the bees that I put on foundation that year were cured, and the next year I cleaned it put out.

The first year I tried to save the brood by piling up hives filled with brood and a few bees to protect it, but I think this a great mistake. It seems like a great sacrifice to cut out those solid sheets of hatching brood with but a few cells showing any disease, but when one stops to consider that by keeping them other colonies may be infected, and the same process gone over again, it seems to me to be penny-wise and pound-foolish. Desperate cases need desperate remedies, and the sooner we get rid of every vestige of the foul stuff the sooner will we be rid of the disease. One can not be too careful while doing the work.

I was told many times that the disease would show up again as bad as ever in a year or two. and I have refrained from writing, thinking I might laugh too soon; but 6 years is long enough, and I am sure if the disease reappears it will be from outside causes.

Another reason for not writing on this subject sooner is, that I thought possibly the disease might be more easily gotten rid of in this dry and mild climate, or perhaps it might be in a milder form, but I know of those whose bees contracted the disease the same year that mine did, and from the same cause, and their bees have it today as bad as ever.

If each one did his duty, foul brood would be wiped out, and we would hear but little about it. It is unreasonable to suppose every one will try, and this is the time for the inspector to do his duty; he, being armed with authority, should see to it that all delinquents did their part. It seems to me it's up to the inspectors, whether we keep on threshing old straw through the medium of the bee-papers, or whether they get at it and clean the country up.

GETTING QUEENS FERTILIZED.

On page 168 (June issue) J. E. Crane is quoted as saying:

"I made a large number of new swarms with laying queens, but I found it very difficult to get those young queens fertilized."

If he is quoted correctly, I do not

know what he means. I suppose he has reference to my apiary, a picture of which was shown in Gleanings in Bee Culture, and I wanted to call his attention to what J. F. Munday says on the same page, in the column to the left, "about "Spreading Hives in the Center of the Apiary." I have an apiary on level ground, and have the same trouble as Mr. Crane and Mr. Munday, and I am at a loss to know what to do. There are too many bees in the apiary to scatter them as Mr. Munday does, for they would cover too much ground to get over when extracting, and it would be a big expense to move the honey-house, for the cellar under it is walled and cemented. Can some one help us out?

I do not have a particle of trouble with the other two apiaries which set on slightly sloping ground. The bees do not drift, and the queens get fertilized as readily as in nuclei, which are some distance apart.

Jamul, Calif.

Non-Sitters vs. Non-Swarmers

BY C. P. DADANT.

I believe that the editorial with this title in the September number of the American Bee Journal, in which the editor criticises my criticism, is intended to draw me out with a fuller ex-The subject of this discusplanation. sion, which the reader may not recall, is the possibility of breeding nonswarming bees as non-sitting chickens have been bred.

I can see a very positive difference between the two as to results. I tried to explain it by saving that a non-sitting hen does not suffer any inconvenience, while a non-swarming colony might suffer from overcrowding. The editor asks whether a hen, which is put into a cold-water bath, or tied to a does not suffer inconvenience. Certainly; but that is not a non-sitting hen; on the contrary—and the incon-venience we put her to comes from our desire to stop her sitting, so she may resume laying.

Races of chickens in which the desire to sit has been greatly eliminated, have been secured by constantly selecting to breed from such birds as produced the largest number of eggs between sittings. For this purpose, either artificial incubators or more regular sitting races had to be employed in the hatching of the eggs. Thus races have been propagated in which the propensity to lay is out of proportion with their sitting. No inconvenience is created to those hens by their abnormally large laying. They produce more eggs than they would if left to natural conditions-more than they could possibly hatch, four times over, perhapswhen came their time to sit.

This is artificial evolution, created by man's desire to consume eggs. But if we were to abstain from using other sitters or artificial incubators, and left the chickens to their own resources, the loss of eggs resulting from the inability of the hen to cover all of them when she did sit, and from the age of some of the eggs which would be no longer fresh, would soon breed out this artificially-bred propensity. Most

of our domestic chickens, even the sit ting races, lay more eggs before sitting than they can well cover, and our rural housekeepers know how much waste there is usually in a stray hatch of chicks.

But even in chickens, in order to secure non-sittters to the greatest possible extent, it is necessary, according to authorities, to keep them in favorable condition. In a little work, entitled "The Business Hen," after describing the non-sitting strains—Houdans, Black Spanish, Minorcas, Leghorns-the author warns us against the danger of over-feeding or under-feeding, both of which have influence upon the results. As hens that never sit are as yet unknown, the only point secured is a very protracted laying previous to

sitting,

With our bees we reduce the desire to swarm, of course, when we give them ample room both to breed and to store honey. We also keep the swarming down to the lowest limit by having young queens, for much of the queencell rearing at swarming-time comes from a desire on the part of the bees to supersede their queen. If the queen is still vigorous and the colony strong, swarming results. We will secure non-swarming bees by breeding as much as possible from such races as are slow in rearing queen-cells. Will this be pos-sible without at the same time securing colonies in which the danger of extinction is great? Ample room in both lower and upper story is certainly the main desideratum. But although we have practised here the giving of a supply of ample room in empty combs for years, and have secured perhaps the minimum of swarming, I have never hinted or thought that we had bred out the swarming instinct in our bees, for just as often as we neglect to furnish both breeding and storing-room in time, at the beginning of the harvest, we are sure to have natural swarms as positively as do the producers of comb honey in small hives.

But let us suppose for a minute that we had succeeded in producing a non-swarming race of bees. Unless those bees were wanting in prolificness and honey-gathering qualities (in which case we should discard them), they would be put to great inconvenience at harvest time, if they were at all neglected, for their ordinary relief for lack of room or ventilation would be absent. There is not much danger of this. nere is not much danger of this. The swarming instinct has been bred in them by evolution, so that they may simultaneously propagate their kind and relieve the crowded condition of their home, and this instinct—the first symptom of which is the rearing of young queens—will be difficult to eradicate.

However, we may greatly help to

However, we may greatly help to lessen swarming by fulfilling a few re-quirements within our reach as follows

1. Have ample breeding room for the queen in the lower story.

2. Give sufficient room in the supers to keep the bees busy.

3. Have the hive well shaded from the direct rays of the sun.

4. Give ample space for ventilation, so the bees may, without too great effort, send a current of air through the

hive. When room, shade and ventilation are given there is no clustering out.

5. Remove drone-comb as much as possible in early spring. Numerous drones annoy the bees and make the home uncomfortable in hot weather. The comb thus removed must be replaced by worker-comb, not trusting the bees in the rebuilding, as they might build the same kind.

6. Have no old queens-none over 2 years old-unless they are still very

prolific.

Queen-cell removing is practised with some success, but the average bee-keeper can not follow this method, as it requires almost daily attention

during the busiest season.

With the fulfilling of these conditions by artificial means, for generations, there is probably a slight opening for a decrease of the swarming instinct, since some races are known to have greater swarming impulse than

Hamilton, Ill.

Keeping Honey—Breeding Bees

BY DR. A. F. BONNEY.

Every once in a while some bee-keeper is delivered of an idea which should be classed as a "Bright should be classed as a Thought," and Thought," and perpetuated. "Keep More Bees" was one of them; and passing the others I know of I wish to call attention to what Mr. C. P. Dadant writes in the American Bee Journal for September, 1911, page 271:

"But grapes and other fruit are perishable goods. When they are once picked, they must be sold. Not so with honey. You may store away your honey and sell it at your leisure."

Any one looking over the bee-papers will often see bee-keepers urged to sell their honey before the Holidays, the reason given being that the demand for honey falls off or ceases after that date. I early became imbued with that idea, but after I put a furnace into the house, which enables me to keep bulk, comb, and extracted honey, without its granulating—or largely, at any rate—I found that there was a steady demand for honey all the time. Believing what I had read in the books, one season I put myself out to sell a thousand pounds of No. 1 section honey, on which, had I kept it, I could have made a couple of cents a pound more. A cent a pound is \$20 a ton. Hum! Now I hold my honey; and if I do not sell it in December I do in March.

BREEDING FOR IMPROVED BEES.

In the American Naturalist for August, page 471, is an article by Dr. J. Arthur Harris, of the Station for Ex-Harbor, N. Y., entitled, "A Coefficient of Individual Prepotency for Students of Heredity," which every bee-keeper who aspires to improve bees by selection and breeding should read. One tion and breeding should read. One passage I noted, making an interroga-

"The necessity of dealing with each generation independently is also imposed by the possibility of a differentiation between any two generations due to purely environmental (meteorological or edaphic) influences. Taken as a whole, the entire off-

spring generation may be superior or inferior to the parental generation; and this because of no hereditary influence at all, for all families may be raised or lowered proportionately."

There is so much that is good in this article that I am tempted to quote further, but will add but this:

"However well one may know the somatic characters of an individual, or however intimate his knowledge of its ancestry, the ultimate test of its value as a starting point for a new race is the quality of its offspring. The proof of a parent is its produce has been recognized as valid by various breeders since the time of Louis Vilmorin...."

HIBERNATION.

It may interest the readers to see this compilation: "Hibernation," a term used to define the condition certain warm-blooded animals assume to pass the winter. The definition is: "To pass the winter in a close place. The definition is: Hibernation is a peculiar state of torpor." "Hibernation is not produced simply by cold."

Encyclopedia Britanica says: "It is an error to suppose that hibernating animals can stand any degree of cold. Hibernation of warm-blooded in warm climates is called "Aestination." "An analogous condition to hibernation is diurnation, as the day-sleep of bats." "In cold-blooded animals, as the Amphibia and Reptilea, respiration and digestion are entirely suspended dur-ing hibernation."

I believe hibernation in the coldblooded animals and insects is caused entirely by cold, but can not find cor-

roborative literature.

GLASS VS. TIN HONEY-PACKAGES.

There are always two sides to a question, and sometimes more. I believe with Mr. Grenier, that there is nothing better than a glass jar for honey, but, I restrict it to my local retail trade. When, also, any one wants more than 3 pounds (a quart Mason jar), I sell in a tin pail, and use only the 10-pound.

QUEEN-REARING IN AN ISOLATED REGION.

I am just back from a trip to South Dakota, and if Mr. Gately or any one else wants to try out queen-rearing where there will be no "wild" bees or other kinds to bother, he can find such a place in either of the Dakotas, where there are thousands of acres, if not square miles, where a bee has never been known.

While I write, Mr. William Newell, State Entomologist of Texas, is, I am told, working with bees under similar,

or identical, conditions.

I might add, just for a joke, that I have an average of 60 pounds to the hive from some "scrub" bees, when others with "improved" bees had to

To extract a Bright Thought, I want to ask Mr. Gately: In the 50 years we have been importing bees, Italians, what have we gained more than Italian bees? Honestly, now, as between ian bees? Honestly, now, as between students, is it not, as yet, only intelligent guesswork, this rearing queens? Note again what Dr. Harris says, in the American Naturalist, page 473, Vol. XLV: "The proof of the parent is its produce."

I think if Mr. Gately and other investigators will study Mendelism closely they will not be so swift to assert that

we have improved the bee. That we have isolated colonies which yield largely, I admit—I have had several such; but what of the offspring?

I assert that only the Diety can tell what the result will be from breeding a pure Italian queen to a pure Italian drone, in regard to honey stored, and that is all the commercial bee-keeper cares about. We may get color, size, and all that; the rest is all conjecture, and we have to wait a year or two to find out.

Buck Grove, Iowa.

Working for Purity of Stock in Bees

BY G. M. DOOLITTLE.

I know it is a question in the minds of some of our best bee-keepers whether purity of stock is any great advantage, quite a few claiming that a mixed race is as good for the production of either comb or extracted honey as are bees in their purity. Then there are others fully as certain that if we would make any improvement in our bees in the future years, said improvement must come by taking a certain race which shows the best characteristics and breed for the best, till we have something much better than the original. And to my mind these latter have the advantage. Although I fully believe that a first cross between two good races of bees gives a great degree of energy, still, if we persist in such crossing or working from the hybrids which are thus obtained, the chances are that our bees will revert back toward the inferior faster than toward the goal we are seeking after. fore, I have tried building up a superior strain of Italian bees looking especially toward the comb-honey pro-duction side, as (after trying all the bees imported into this country, as well as the common German or brown or black bee, which was in the United States at my beginning in this world) I find the Italian bee the best of any for the locality of central New York, which is where my lot was cast.

But the breeding of any certain race of bees is not nearly so easy as to try for a fixed standard of our other do-mestic animals, in that we have no positive control of the male progeny from certain mothers which we may have selected. As all mating of bees is done in the air, far away from the sight or influence of man, the question which confronts every bee-keeper who is desirous of keeping pure stock, or the one who wishes to improve stock along any line by a careful selec-tion of the best is, "How far apart from other bees must they be kept in order not to have the young queens from his selected mother mate with drones from other colonies of bees?" Then the singular thing is, that on this question the "doctors" in apiculture very materially disagree.

Some years ago, one of our noted queen-breeders wrote me in these

"There are some who entertain the idea that a race of bees can not be kept pure unless it is isolated several miles from all other races. I have tested this matter

pretty carefully during the past 20 years, and have found that half a mile is as good as a much greater distance."

He then went on to say at length regarding the time the queen was gone from her hive on her wedding-trip, from which he was sure he had reached the right conclusion. He gave this time as 5 minutes, and from this he reasoned that it would be impossible for a queen to fly more than that far and return, or more than a mile during such a short space of time, say nothing of the time of mating. He claimed queens were very slow of flight; that drones would fly a mile or more, but queens would not. But when I wrote asking him what was to hinder those drones from being that mile from home when the queen reached the end of her half mile, he was silent regarding the matter.

ing the matter.

Now, if the drones go a mile from home, and the queen a half mile, very many mismatings could happen three times the distance he gave, or 1½ miles away from where our choice queens and drones were reared, which made his whole claim only guesswork. And this was from a man who reared hundreds and thousands or queens, and sent them all over the country as pure.

And we have in our ranks today those who believe that 1½ to 2 miles is all the distance needed to insure the pure mating of stock.

I do not wonder, sometimes, that these come to such a belief, for it is far easier to believe something we wish to believe than it is something that requires lots of labor and sacrifice to meet something we will have to did we dig deep enough to prove the logical conclusion of the whole matter.

Now we will take the 2-mile belief, which is the greatest distance many will allow. At that distance we have an area of territory 4 miles in diameter. or 2 miles in every direction from our selected queens and drones. one who never tried making sure that there were no drones within a distance of 4 miles in diameter, or 2 miles in every direction from his apiary; and also the making sure that there were no undesirable drones among his own bees, this might seem a comparatively easy undertaking; but the one who has tried knows that there are very few problems in apiculture that can equal such a proposition. And especially is this true where there are tracts of woodland having large and aged trees in which there are cavities in abundance suitable for a home for all absconding swarms. It is bad enough for the one living in a an open country, for even here bees frequently go into the walls of old buildings, and clefts in the rocks. But where there is nothing of this kind in the way, we have all the domestic bees within this area to contend with.

And this contention is often something quite disagreeable, for, try the best we can, it is not every one who keeps bees that is willing to allow us to make a change of the whole of the queens in his apiary, even if we will furnish and introduce one of our best improved queens to each of his colonies without trouble or cost to him. And if there is one colony of undesirable stock within this area, that colony, if unmolested, is quite likely to rear more drones than the practical

apiarist will allow in a score of his colonies, while with an obstinate person who has from 20 to 50 colonies, our task is well-nigh helpless.

Then, should we find all agreeable to our changing their queens from the common stock to our best improved Italians, we have no choice of individual drones. What would the average breeder of our domestic animals think of the proposition of improving his horses, cattle, sheep, swine, or poultry. without the privilege of knowing any of the characteristics of the male from which the offspring of his best selected mother was to come, knowing nothing only that it would be from the same race or strain as the mother?

Without going further into this matter, it will be seen how the apiarist who is alive to the improvement of his stock is handicapped. And then, when this live apiarist has dug to the very bottom of affairs, he is compelled to beileve that his selected queens will often mate with drones 5 miles away, so that his area must be 10 miles in diameter instead of 4, this handicapped part rises up almost as a mountain before Therefore, I have done the best I could reasonably to procure all Italian queens from my best stock within the last-named distance from my apiary, and, later, when I was desirous of arriving to the nearest perfection possible, I have each year followed a plan looking toward this greater perfection. Near the close of the main honey-flow, at which time the very last eggs for drones will be laid by my choicest drone-mothers, I have massed this drone-brood in a very strong 2 and 3 story queenless colony, the third story generally being almost entirely of honey, so that these drones need not be scrimped for the food necessary to their full development, and frequent flights later on when all other drones are driven out and killed at the end of the drone season.

At the time the other drones are being driven out, queen-cells are started from my best queen-mother, the colonies rearing them are liberally fed and shaken up so as to produce the best specimens possible, when, at about the time these young queens will fly to mate, the colony having the best drones (which have been preserved from death while the others were being slaughtered, by the means already given) is opened on some cloudy, cool day, when there is no fear from robber-bees, and all the combs carefully looked over, picking off and killing every inferior drone as to size, imperfections, color, or in any way deformed, so that we have nothing but hand-picked stock left along the drone-line for our queens to mate. This is the best thing I know of so far in sight; but I have been experimenting, and hoping that some-

thing better might soon appear. Borodino, N. Y.

Directions for Hunting Wild Bees

BY HARRY A. PACKARD.

Honey-gathering from the nests of wild bees is a lucrative occupation, and though there are modern ways, the old methods employed by the veteran beehunter seem to be about as successful as any in the long run.

After making a small box with a little trap door to it, I put in a small piece of honey-comb, then fill the cells with sweetened water—sugar diluted with water, very thick.

This prepared, I station myself in some favorable spot in the woods and try to attract a bee to the feast of sugar. Unless caught by a bird, or prevented by some accident, the bee will invariably return for more sweet just as quickly as the first load is deposited.

In a few minutes I have quite a swarm frequenting the little box, gathering the sweet and flying in a pretty straight line to their hive.

As soon as I get a line on the bees I can get pretty accurate information of their home hive. After that, if one is familiar with the woods—and no one hunts bees unless he is versed in woodcraft—the work is easy.

It is well to begin operation early in the morning, within a mile or more of a mountain slope, where there are likely to be hollow trees.

It is an easy matter to gather a few bees from the wild flowers and drop them into a box. The comb serves simply as something for the bees to stand on to prevent their wings from being smeared, as then they couldn't fly. Then when you are all ready to begin your bee-hunting, let one of the bees enter the apartment where the sugar and water is. The bee will buzz around for a while, but put your hat over the glass so as to darken the box, and the bee is quite sure to settle down and begin feeding.

Then put the box on a stake a few feet higher, built for the purpose; slip off the cover, and stand back a few paces. In a few moments the bee will slowly rise, make a few spiral flights to get the bearings, then start on a straight line for the hive.

If the bee goes towards civilization it is usually safe to assume that it is a domestic bee, and it is best to try another. When one starts toward the mountain it is equally sure to be a wild bee. If the swarm is not more than two miles away, it will return in the course of 10 or 15 minutes, and others will usually come with it.

As soon as there is a well-established line running, it is usually well to cross the line by shutting the box and keeping a few bees captive, and taking them a quarter of a mile to another spot, and there set up again.

In a little while there will be another line at the work, and where the two lines intersect the "hive" may be found.

In Praise of the Honey-Bee

BY D. M. MACDONALD.

As a home hobby or pastime no other pleasurable or health-giving can compare with apiculture, while it has the further important recommendation that it is a paying one, especially for those leading a sedentary life. No better can be found, as the time devoted to it is spent in the open air with Nature, and all her works for a study.

The bees lend a new meaning to the flowers, and we take additional interest in their beauty and grace when we look at them, accompanied by the murmur that comes to us on the air heavily laden with the perfume of honey; for the bees are fed on Nature's purest and richest offering—the soul of the flowers.

We are called by this delightful pastime to the full enjoyment of June's floral offering, to the pleasures of summer's sweetest and sunniest hours, and to the charms of blue skies, green grass, and the softest and balmiest weather. Only when Nature smiles her fairest, when the sun shines its brightest, and mankind as a whole delight to spend their time beneath the open vault of heaven, do bees call for the special care of their keepers. At such times do we not realize how well worth it is to live and go on enjoying the pleasures and delights our pleasant calling insures us? Wealth through a bee-hive should be a secondary consideration to those who place health ahead of any other consideration. But here is a calling capable of bestowing both health and wealth on all who practise this pleasing pastime — health in a double sense, for honey, too, is health.

A FASCINATING STUDY.

In the order Hymenoptera we find many insects which appear to all lovers of Nature. We can not but admire the structure and uses of many of their wonderful organs; their ways, habits and customs will well repay close observation; their various modes of providing a living, and the admirable means they adopt to secure ends are intensely interesting. The study of no other insect, however, is so full of fascination and so fertile in the marvellous as that of the honey-bee. Even the most superficial observer must admire the remarkable development of instructive powers displayed by the denizens of a bee-hive, and all lovers of home and kindred must appreciate their social qualities. Wise, with a prescience excelling that of all other insects, the small worker-bee is gifted with a brain, quick, subtle and active, and a foresight so far reaching and provident as to make us at times claim for her mental powers of a high order.

The bee is essentially a creature of the crowd, and the bonds of friendship and kinship are the very essence of her being. Without the close bonds of union a colony of bees would soon cease to exist, because the propagation and upholding of the race require close combination and unity of effort. Therefore, we find the domestic virtues strong in the hive, and the teeming thousands act in the closest consideration. As our great poet Shakespeare says, "They teach the art of order to a peopled kingdom." In each of these commonwealths each will for the good of the whole is bent, and every bee thinks of self in a secondary way, only sinking her own individuality for the good of the community as a whole.

"MINE AND THINE."

While every simple unit of the community has a free range over the whole interior, all the bees of other hives are rigidly excluded. When the guards at the entrance, by the aid of their mysterious antennæ, spy strangers. and find them attempting to enter where they have no right to be, then woe betide these would-be intruders! For all such there might be written over the entrance of every bee-hive Dante's inscription over another place—"Abandon hope all ye who enter here!" And yet, with a wisdom above what is written, let that same strange bee but come with a precious load of nectar, and thereby pay toll at the strange hive, the guards allow it to pass, and the other workers receive it in a spirit of adoption, as if it were a true daughter of the hive. Let, too, young bees quietly alight on the flight-board and seek entrance there-it is not denied them. The prescient workers may reason it out that here is no enemy, but a friend one who ere many days have passed will become a valuable asset, able to take its place amid the industrious band of toilers on whose efforts will depend the garnering of the honey and storing the fruits of the fields against the time when winter's storms will make them all close prisoners to their

This admirable arrangement for preserving the balance of power in a collection of hives, shows us how well and wisely the Great Preserver of all has acted in conferring this marvellous instinct on the bees of each community, where each home is preserved by the peculiar colony odor.

No One Touches Me With Impunity!

Contrary to common belief, bees are really quiet and gentle creatures if left unmolested. Man, at times, suffers from the wrath of the bee, and becomes its victim, but only when he is the assailant, or when he incautiously departs from certain well-known rules, which, acted on judiciously, ought to safeguard him from any serious consequences. Nature has wisely implanted a sting in the bee, and when called upon it can use this weapon most effectually in defending its hearth and home. Without such a protection the race would not exist, for the bees would become extinct, because every bird, beast, and insect of superior strength would prey upon it and rob it of its enticing sweets.

Now, guarded as they and their delicious treasures are by the venomous stings of several thousands of Amazonian warriors, all willing to sacrifice themselves on the altar of duty in defence of hearth and home with its hard won stores, other insects of even superior size and strength show a due regard to rights of possession, and leave them unmolested. "Nemo me impune lacessit" might be the bees' motto, for each republican stronghold is an impregnable fortress, and no enemy can expect to intrude on the sacred precincts, meddle with their rich stores, or disarrange their internal organization with impunity. Man, when he has become a bee-keeper, is the first to see and admire the beauty and utility of this admirable arrangement which perfects and completes the order and harmony of the hive.

THE BUSY BEE.

The industry of the bee is one of its finest traits. What more delightful

sight can even be imagined than a strong colony of bees working on a full late flow such as the heather or the basswood, on some bright day of glorious sunshine. What hurry and bustle is displayed by both the out-going and incoming workers, yet by some wonderful instinct there is no congestion. How wisely and well they, as well as the guards, arrange their exit and entrance so as to avoid all semblance of crush or confusion, and how unerringly the foragers, heavily laden with the right spot in the supers or brood-frames with their loads of honey, pollen or propolis, depositing each just where the spirit of the hive teaches them to best.

Looking on this internal organization of a populous colony, one realizes the full force of the proverb, "As busy as a bee." No other creature displays such an overmastering zeal for labor, and no other can carry it on from early morning until late evening with such unflagging energy and perseverance. Labor, indeed, seems to be the bee's sole delight, and at no other time does it appear to revel in a sea of happiness more than when it is plying its industry with the utmost tension. It desists only when weather frowns, when nectar ceases to flow, or when night for-bids more work. Ceaseless toil, un-tiring energy, is a characteristic of those hives of industry, and their labor seems incessant as they toil by night as by day, carrying on the thousandand-one duties necessitated by the calls of brood-rearing, honey-maturing, depositing nectar, and sealing up the store-houses.

A PERFECT GOVERNMENT.

The government of our own large cities is a complex and intricate combination of wheels within wheels, and it takes the best energies and the most fertile brains of high-paid officials to manage each department. In this Commonwealth of Bees the government is far more simple, yet in its results far more perfect. Each laborer is as good as her neighbor. Of the teeming thousands none works for herself alone, because each will for the good of the whole is bent, and every bee, sinking individual tastes and inclinations, sets the good of the community always before its mind's eye. This republican stronghold consists of thousands, but they labor as if one single mind pervaded the whole.

The vice of selfishness is unknown, and no jealousies exist, no self-interests mar well-laid plans, but all is harmony, peace, concord. In a hundred different ways we have associated effort in its best form and yielding the most fruitful results. One bee setting up its own will, its own ambitions, its own desires, or trying to lead a life of grand independence, would quickly find how futile its efforts would become. The bee can only exist as one of a crowd, and every bee in that crowd may find itself as important to the well-being of the community as any other. Hence, there is a spirit of content, peace and concord in every member. By combination alone they can prevail. Great deeds may be performed by association. Segregation means chaos and the very

negation of successful results. Wisely bending their wills to the inevitable, they combine, and the combination produces the ideal in government.

Banffs, Scotland.

Pearce Method of Bee-Keeping

This is an illustrated pamphlet 6x81/3 inches, "explaining the keeping of bees successfully in upper rooms, house attics or lofts, whereby any one either in city or country is enabled with only a small expenditure of labor to get a good supply of honey without coming in contact with the bees, and without having the bees swarm out and leave, or being troubled from stings, as you work on one side of the wall and the bees on the other. This method also tells the commercial bee-keeper how he can divide his bees when he wishes to, instead of waiting and watching for them to swarm. It can all be done on the same day, or days if more than one apiary, as the time required for this operation is merely nominal, no swarms issue and go away. These methods are fully explained in this book, and how to care for the bees on the Pearce

We mail this pamphlet for 50 cents, or club it with the American Bee Journal one year—both for \$1.10. Send all orders to the American Bee Journal, 117 N. Jefferson St., Chicago, Ill.

"Bee-Keeping by 20th Century Methods; or J. E. Hand's Method of Controlling Swarms," is the title of a new booklet just issued from the press of Gleanings in Bee Culture. While it is written particularly to describe Mr. Hand's methods of controlling swarms by means of his new patented bottom-board, the booklet contains a great deal of other valuable matter, among which is the following: The hive to adopt; re-queening; American foul brood; wintering bees; out-apiaries; feeding and feeders; section honey; pure comb honey; conveniences in the apiary; producing a fancy article of extracted honey; swarm prevention by re-queening; increasing colonies, etc. The price of this booklet is 50 cents postpaid, but we club it with the American Bee Journal for a year—both for \$1.30. Address all orders to the American Bee Journal, 117 North Jefferson St., Chicago, Ill.

"Southern Bee-Culture" is the name of a booklet written by J. J. Wilder, perhaps the most extensive bee-keeper and honey-producer in the whole State of Georgia. It is a real hand-book of Southern bee-keeping, with methods so simply described that they are easy to carry out. Every bee-keeper, especially in the South, should have a copy of Mr. Wilder's booklet. He conducts apiaries by the dozen, and produces many tons of honey every season. He tells in careful detail just how he does it. The price of this booklet is 50 cents, or we now club it with the American Bee Journal for a year—both for \$1.30. Send all orders to the American Bee Journal, 117 North Jefferson St., Chicago, Ill.

DR. MILLER'S ANSWERS



Send Questions either to the office of the American Bee Journal or direct to Dr. C. C. MILLER, MARENGO, ILL.

He does NOT answer bee-keeping questions by mail.

Feeding Bees for Winter

A few days ago I purchased a Miller feeder, placed it in an empty hive-body on top of a colony of bees I wanted to feed, and put the hive-cover on it all right. For a little while I saw robber-bees entering the hive. I finally was compelled to remove the feeder. This is my first attempt to feed bees. I see by the bee-papers that September is the time to feed. My bees have done very poorly this year, and I fear they will not live through the winter unless they are fed. How can I feed them and keep the bees from robbing?

Answer.—I don't know of any way of feeding that is safer from robber-bees than by the use of the Miller feeder. I have fed in that way hundreds of times without any robbing, and I think I never heard of a case of the kind before. I wish I had fuller particulars. It may be that the colony was weak, and that in some way robbing was started just as it would be without any feeder in the case. The only thing I think to suggest is to feed in the evening, and partly close the entrance.

Bee-Bread-Comb vs. Extracted Honey-Eyes of Bees

Can bees live without bee-bread in the

winter-time?

2. Can they live on bee-bread a week or

2. Can they live on bee-bread a week or two without honey?
3. Can the golden Italian bees gather honey from the red clover, or just pollen?
4. Does the queen lay drone and worker eggs in the old queen-cells?
5. Do bees gather nectar from corn-flowers?
6. How many pounds of honey does it take to make one pound of wax?
7. Comb honey sells at 12½ cents per one-pound box here, and extracted honey at 10 cents. Which is the more profitable?
8. Mr. C. P. Dadant said that bees have 5 eyes—3 small ones to see within the hive in the dark, and 2 eyes to see in the open air.
What do you think of it?

ANSEVER — Yes but they must have it

Answers.—I. Yes, but they must have it in the spring before they can rear any brood.

2. I think not.

3. If they work on red clover at all, they probably get honey. Sometimes they work on it, and so do blacks, but generally they do not.

4. No.

5. Yes, if by corn-flower you mean the flower Centaurea Cyanus. If you mean the tassels of Indian corn, I think they get only pollen.

tassers of indian country.

6. I don't know. For a long time it was counted 20 pounds. Then some figured it out 7 pounds or less. Possibly 10 or 12 pounds may not be far out of the way.

7. Extracted.

8. That's what the authorities tell us. But it must be remembered that the 2 eyes are

it must be remembered that the 2 eyes are compound eyes, and instead of saying that the worker has altogether 5 eyes, it might be nearer the truth to say it has from 3500 to

Perhaps Yellow Jackets-Wintering Bees-Stimulative Feeding

Ialive Feeding

1. I have noticed a number of bees having bright yeilow and black stripes hovering around my hives and evidently trying to rob. Can you advise what kind they are, and their habits?

2. In wintering outside, if the honey-board is left on over the brood-frames, and burlap laid on top of the honey-board, and then an empty super filled with leaves placed above, and then the cover, do you not think it would be better than merely placing the top cover directly on the hive, it being understood that the entire hive is to be protected by outside packing and the case in both arrangements?

3. Do you not find the yellow Italians more vicious than those of a darker color?

4. I can occasionally obtain sweepings

from a sugar-warehouse, particularly moist yellow and brown sugar. What, in your opinion, is the best method of feeding this sugar to stimulate bees? How would it do to spread in shallow pans in the spring before supers are on?

ANSWERS.—I. They may be yellow wasps, which look like bees, but are more slender. They are commonly called yellow jackets. I don't know much about their habits, only they are social wasps of the genus Vesta, and I think they have their nests quite commonly in old, rotten stumps. They may be often seen about sweets and decaying fruits, 2. Yes, the top of the hive is the part that should be kept warmer than the rest.

3. They vary; some are vicious, and some gentle.

4. If there is a time when the weather is good for the bees to fly, and there is no pasturage for them, you will imitate the natural flow by giving them the feed very thin, even as thin as o parts water to 10 f sugar. Feeding in pans is all right, and you will do well to throw in cork chips as a float. Your grocer throws away these chips that come as packing in kegs of grapes in cold weather.

Introducing and Rearing Queens—Keeping Italians Pure, Etc.

It is it necessary when you cage a queen for a few days in a hive, or introduce her from a baby nucleus to a colony, to put candy in the cage? Will the bees not feed the queen through the screen?

2. When I have a super with shallow frames, bees, brood, and queen reared in it, and I want to supersede the old queen, could I kill her two days before inserting a new queen? and instead of caging the queen, could I take simply the super above mentioned and set it on top of the queenless hive, and in a few days take the super off and use it somewhere else? Will the bees accept the queen that way, or will they kill her? This morning I had a similar experience. I had too many bees, so I thought I would unite them. I killed a young queen in one of the newly-made colonies, and set this queenless hive on top of another hive having a young queen; but, alas, after half an hour I looked in the hive and found the queen balled on the bottom of the double-deck hive. I caged her at once, but I had no candy to feed her, so after a while I thought I would try the flour-sprinkling that I had read about, and today (after a days) I looked and the queen was gone—I could not find her, so the two hives are now queenless. I tried the flour method on 2 other colonies, where I shook the bees from the other hive in front, and it worked all right. Here I found the queen and one dead on the hive-bottom, so I suppose the queen from the first hive must have gotten in the wrong hive.

first hive must have gotten in the wrong hive.

3. I would like to rear my own queens in the future on your plan that I read recently—in supers with shallow frames. I have a bee-house where I keep separate 4 double-deck hives on the Pearce plan. These are my best stock for breeding. Next spring I would put on top of this hive 3 supers with shallow extracting frames, filled with medium-brood comb foundation. About May 1st I would put the supers on and feed for brood-rearing, In 3 weeks (May 22) I would put a queen-excluder between the supers and hive-bodies, and thus induce the bees to build queen-cells in the shallow supers. Will they build queen-cells in that way?

After 8 days I expect to have a nice lot of

Will they build queen-cells in that way?

After 8 days I expect to have a nice lot of queen-cells to select from, then I would take the shallow supers away; have on hand a certain number of shallow supers prepared with bottoms and covers, close the entrance of these supers bee tight with green grass, put in each of the so prepared supers 3 shallow frames with adhering bees that I had taken from a hive a little while before, and see that there is at least one nice capped queen-cell to each a shallow frames, and add one frame with a full sheet of comb

foundation, so that every nucleus super thus made would contain one nice queencell, 3 shallow frames with brood, honey, and bees, and one frame with comb foundation. Then I would put the covers on the supers so prepared, and remove them somewhere in the woods to hatch and mate the queens. Will that work? After I had taken the supers from the breeding hives, I would take all the 4 double hives away from their stand in the bee-house, put in their place a new empty hive with one-inch starters only, and put 2 supers filled with foundation baits and starters to every empty hive, and shake all the double hives to every old stand, and put more supers on whenever necessary; but I don't know what to do with the beeless brood, as I work for comb honey and have no extractor. I don't care to put this brood on some weak colony, that would reduce my comb-honey supply. Could I put them on top of the supers on every hive with bee-escape board, and above the bee-escape put the beeless brood on the 2 hives until they all emerge, in 21 days? Will they hatch without bees, or would it be better to destroy the brood and make the combs into wax, as I have no use for full combs? Dr. Phillips and Walter S. Pouder say that shaking swarms on full combs or full sheets of foundation is a failure; but that inch starters are the right thing to use.

4. After I have emptied the old brood-combs I could cut them off so as to leave only one-inch starter or cells on the frames for next year. Will that be all right, or do you know any better plan of disposing of those beeless combs of brood, when one doesn't care for extracted honey?

5. Last spring I bought is select tested golden Italian queens, and I lost 3 when introducing them. They were expensive queens, but I wanted pure-bred bees. But I see now, to my sorrow, that all the surrounding bees are black drones. How can I had known this before I would have bought the queens wrote that his queens were o months old when I got them, which was in May, 101. Will they be good for the season of 1013, o

of 1013, or must response of 1012?
7. Will shallow extracting frames fit in any of the dovetailed 10-frame supers, or are there extra supers for them?
8. Is there any way to extract honey without an extractor and not injure the combs?
WISCONSIN.

Wisconsin.

Answers.—I. Generally the bees will feed the queen although no candy be in the cage. But conditions make a difference. If, in a hive having a laying queen, you cage another queen, the queen in the cage may be neglected, especially if she is a virgin. In general, a laying queen is more sure to be fed than a virgin. If you cage a queen in a colony that has been queenless for as much as 2 or 3 days, you may feel easy that she will be fed.

2. Your proposal to kill the queen in one story, and 2 days later unite another story with a queen in it, ought to work. You can make it still more sure by putting a sheet of newspaper between the 2 stories, for that will prevent the strange bees from getting at the queen immediately. In the case you mention, if I understand correctly, you united immediately after killing the queen, without waiting the 2 days. Then you tried the flour, but that was hardly a fair test, for after the queen had been balled the bees would not accept her so readily as if she had been floured and given before the balling.

3. You can not rely upon the bees with a

would not accept her so readily as if she had been floured and given before the balling.

3. You can not rely upon the bees with a laying queen below to start cells over an excluder. They may start one or two, and they may start not a cell. If you get enough cells started, the scheme with grass stuffed into the entrance will work; but it will also work at home without you taking the nuclei to the woods. But the rest of your plan will not work so well. If you use only inch starters, I'll guarantee that you will have a great deal more drone-comb built than you will like. If you leave the brood without any bees, much of it may be chilled and lost. If you put the brood over the section-supers, the sections will be likely to be darkened with bits of old comb from above.

4. I don't believe you would gain anything by cutting away all but an inch of the comb. I would rather use the full comb. Besides, as already intimated, the bees will be sure to build a lot of drone comb if you cut the comb away and leave them to build it down afresh. You could pile up several stories of the brood, giving with it a few bees to take care of it, and reduce it to one story in 3

weeks, and with a laying queen you would have a good working colony. Or, you could add the bees to one of the other colonies.
5. I don't know of any way to keep Italians pure with black drones all around you.
6. Likely some of them may be still good in 1013, and some of them not.
7. They will fit all right if the depth is right.

7. They will be a right. 8. No, you can not extract without an ex-

Labeling Extracted Honey

1. Is it against the law to sell extracted honey without labeling the jars?
2. How should a label be printed?
3. Could you give me the address of some company that prints labels? MINNESOTA.

Answers.—I. No, the law does not require a label.

2. The label may be printed any way you like, just so that it does not mislead. You may have the word "HONEY" with your name as producer, with nothing added, or you may add some instruction about keeping honey or melting it when it granulates.

3. You can get them from the A. I. Root Co., Medina, Ohio.

Wintering Bees-Uniting Colonies-Bee-Literature

I. Will a small colony winter better in a hive of 5 or 6 frames than to leave them on the entire amount of frames in the hive?

2. As I winter my bees on the summer stands, I would like to know if cold sides and warm covers would be better than packing all around the hive?

3. When uniting, do you leave any combs in the hive above the newspaper, or do you use an empty hive-body so the bees will go down quickly?

4. I had a first swarm wait until the young queen began piping before coming out. Was there anything wrong about this? I know that after-swarms do this about every time, but I thought it queer for a prime swarm.

swarm.

5. If a colony is extra-large, how large should the hive-entrance be?

6. I have read your "Forty Years Among the Bees," and am a subscriber to the American Bee Journal and another beepaper. What book would you now advise me to read?

WEST VIRGINIA.

Mest Virginia.

Answers.—I. Yes, the less empty space the bees have to keep warm the better.

2. It is of more importance to have warm packing on top than at the sides, for if moisture condenses overhead it will fall in drops upon the bees, while moisture dripping down the sides of the hive would not do the same harm. But in very cold localities it is well to have the sides warm also, having the warmest packing on top. As we get farther south, there is less need for packing at the sides. As far south as you are I don't know whether it would make any difference.

3. It doesn't matter whether empty combs are leftin the upper story or not. The bees will unite just as quickly with or without them. Of course, after the bees have had time to unite, the 2 stories are reduced to one, the best combs of the two stories being selected to fill the one story.

4. Normally a prime swarm issues about the time the first queen-cell is sealed, and of course there could be no piping at this time. In your case it is likely that in some way the old queen was lost, and the bees would have to wait until a young queen was ready to swarm with them, and she would pipe just

to wait until a young queen was ready to swarm with them, and she would pipe just the same as a young queen with any after-

5. Full width of the hive.
6. Hard to say which should come first, but you will no doubt gain from any of the other good books.

Crippled Queens-Moving Bees-Swarming

I. All I know about bees I learned from books. I am practically all theory, as I have never seen anybody handle bees excepting farmers that use "inverted beer-boxes for hives." so I don't know much about handling them. Last year I wanted to make considerable increase, so I made preparation to rear queen-cells by the Doolittle plan. When the cells were all capped over I grafted one or two on each comb of the same super they were reared in after the bees had stuck them fast. I made in uncleiconsisting of one frame of brood, bees and queen-cell, then I added several frames of sealed brood to each nuclei. Every queen hatched all right, but they all hatched crip-

ples, and were unable to fly and be mated. The bees tolerated them for a few days and then threw them out of the entrance dead. The rest of the brood that was reared in the same upper story as the queen-cells was all right. Why were the queens all cripples?

2. This fall I moved, and took my bees with me, a distance of 140 miles from New York to Connecticut. They had a wagon-ride of 10 miles at either end, and a 120-mile boat-ride. The bottom-boards and covers were removed and a wire-screen put on top and bottom. While I was unpacking them the robber-bees were very numerous. They were there in droves, and the more I unpacked the more robbers there were. The last colony I unpacked was a very strong one, and swarmed out while I was unpacking it. It refused to be hived in any kind of a hive. I tried empty combs, full combs of brood and honey, and full sheets of foundation. At the end of 3 days I hived it in the same hive it came from. I had a "beautiful" time trying to keep the robbers out of the hive of the colony that had swarmed. Waswers.—I. My answer can be only a

Answers.—I. My answer can be only a guess. The first guess is that when you wanted to get the bees off the cells, you shook them off, and the shaking of the cells crippled the queens. It is also possible that you formed the nuclei as soon as the cells were sealed, and the young queens, at that time, being very delicate were chilled in the nuclei. It is also possible that the cells were attached to the combs too near the edge, where they would not be in the cluster of bees, and so they were chilled.

2. It is likely that the bees swarmed out in the first place because excited and heated, having been shut up, and being very strong, especially if the weather was warm. Then, afterward, they may have swarmed out the same as swarms so often do, possibly with no good reason that one could see, and possibly because the hive was too close. If they had been put into the cellar until cooled off, it might have helped.

Dividing vs. Swarming

I am a resident of New York city and keep a few colonies of bees in my back yard. They are often made a nuisance by swarming, and then clustering in one of my neighbor's yards. Could you enlighten me with any plan by which I could divide the colonies and thus keep them from flying?

NEW YORK.

Answer.—If you keep the wings of the queens clipped, it will probably help no little. For in that case they would generally return to their old place without settling. You may also practise shake-swarming. Look into the hives every week or 10 days, and operate when you find queen-cells started. Take away all the combs except one with perhaps the least brood in, replacing them with empty combs or frames filled with foundation. The brood taken away may be used to strengthen weak colonies, or it may be piled up several stories high over other colonies. After it has been piled up a week or more, you can use it to make new colonies if you wish increase.

Rearing vs. Buying Queens

I have had one year's experience with bees, and I like the work very much. I had a chance to buy 500 colonies at a discount, so I bought them. I have had them almost 2 years. I do not know much about requeen-ing. I took off 2800 pounds of honey this

Which would be better for me to do about Which would be better for me to do about requeening, hire some one to requeen for me, and I work right with them, or should I send away and get some queens and introduce them myself? I would like to learn more about requeening. I want to have all the bees I can look after and do nothing else, then run for extracted honey. ARIZONA.

Answer.—I don't know enough to say whether it would be better for you to rear your own queens or to buy them. But I can tell you some of the things I think it will be best to do in your case.

First, you should inform yourself as far as you can during the next few months by reading all you can in books and papers about queen-rearing. I especially commend to you Doolittle's "Scientific Queen-Rearing," and about 30 pages of "Fifty Years Among the Bees," beginning on page 234. The knowledge thus obtained will be of much

value to you, even if you should conclude to buy all your queens.

Then next season you will be able to make pretty good work at rearing queens, even if you do make some mistakes. Your success will likely be greater if some one in your employ is an experienced queen-rearer. But whatever your success, or want of success, you may still not know whether it would be better to buy or to rear your queens, and with so many colonies it may be an important question to settle, even if it takes more than one year to settle it. So you will do well to buy part of your queens, and then you can judge for yourself better than any one can tell you.

one can fell you.

You are likely to find that there will be more loss in introducing queens received by

mail than in introducing those reared in your own apiary. Difficulties unforeseen may arise by either plan, about which you will be able to judge best by actual experience. Probably the large majority think it best to rear their own queens, but that does not say that you may not be among the few who will do better to buy.

It may not be out of place to say here that while some think it best to requeen every two years, or even every year, there are others who think they do better to leave the matter of requeening mostly in the hands of the bees, killing a queen only when she is found to be doing poor work, whatever her age, for there may be such a thing as a queen doing better work in her third year than some other queen in her first year.

about one of the vacant hives, and as all of my stock was goldens, I at once found out that a wild swarm was preparing to come in. Later in the day I was about the place, the day being warm and still, when I heard the noise of a swarm of bees. I soon saw them coming across the field. I ran to the apiary and did not have long to wait, for they came over the dwelling, which is quite high, and began to lower, and were soon alighting on the front of the hive they had selected, and in an hour were busy at work on the clover.

I thus had a fine chance to witness this important action in a new swarm selecting and taking charge of a new hive. All of this was done in a small enclosure where there were other flourishing, buzzing colonies, and no mistake made by the new comers.

Again, another swarm came while I was not there, and also did their own hiving. I put several carefully cleaned hives out by the porch of the house, and in them put a dry comb and some foundation starters con venient to get at when my swarms issued, and I was again about the house one morning in June when I was surprised to see another swarm of black bees come from the same direction as the first, and enter one of my empties right by the door. All three of these are doing well, and one of the queens, being a virgin, mated with those beautiful drones of mine, and her bees are now over half very pretty 2 and 3 banded.

I have had trouble with the drones to keep them down. I shall Italianize in the spring. I did my best to find the trees from which these swarms came, so as to get them and save future trouble, but I can not find them. They probably came from afar.

L. L. BROCKWELL.

Only a Third of a Crop

REPORTS AND EXPERIENCES

I have only one-third of a honey crop this year, as dry weather cut off the clover supply. Bees are now working on the asters.

(Rev.) H. H. FLICK.

Murraysville, Pa., Sept. 20.

Hives Heavy With Honey

The brood-chambers are all heavy with honey at this time. I have taken some surplus honey from nearly every colony. Bees are working on dandelions and asters.

Leon, Iowa, Sept. 29. EDWIN BEVINS.

Bees Did Fairly Well

Bees did fairly well this season. Mine averaged so pounds of comb honey per colony, which I sell for zo cents a pound. I am a beginner in bee-keeping, and derive much pleasure and profit from the American Bee Journal.

Witt, Ill., Oct. 7.

Big Difference in Seasons

Last year I had 20 colonies that stored 2000 pounds of honey and increased to 40 colonies, all inside of 10 days. This year it took 40 colonies all summer to store 400 pounds of honey, without any increase.

St. Joseph, Mo., Out. 2. S. A. Matson.

Bees Heavy in Winter Stores

The bees here have gone into winter quarters in fine condition after giving a fair crop of honey. I don't remember when they were any heavier in stores.

The Dewey foundation fastener is the most convenient one I have ever used. It is multum in parvo without a figure of speech.

Wiley, Colo,, Oct. 9. JOHN S. SEMMENS.

Good Report for 1911

This season I secured over a ton of comb honey from 48 colonies, spring count, and increased, by dividing, to 75 colonies. I was away from home from June to October, during which time several swarms came out and absconded, there being no one on hand to take care of them.

ISAAC F. TILLINGHAST.
Factoryville, Pa., Oct. 13.

Light Honey Crop in Maine

As nearly as I can learn, the honey crop all over Maine, with the exception of Aroostook county, is light. We have a good, fair crop in this county, which is in good demand. My own crop was two tons of comb honey, which I am selling for \$17 a hundred, f. o. b., my station. This is our year in Aroostook. As no doubt is known, the potato crop is generally a very short one, but this county has been blessed with nearly a full crop. Farmers are harvesting from 75 to 125 barrels (2½ bushels each) per acre, which sell at the loading station for \$1.35 to \$2.25 a barrel. Two men here have 250 acres each in potatoes—not large for the West, of course. The

county will harvest 20,000,000 bushels of pota toes this year, as nearly as we can estimate We have retalned our old Prohibitory Law in the State Constitution by a small majority. We had hoped for a larger one.

I started to tell a little about the bees, and have gotten off on potatoes and prohibition. Well, it's hard to keep from talking about what our hearts are full of. We have talked prohibition and reciprocity this summer to the exclusion of nearly every other subject in this locality.

The spring and early summer was the most favorable for the bees I ever saw. Forest-bloom, fruit-bloom, dandelion and clover, following each other, with favorable weather; with the clover-bloom came severe dry weather, which changed what seemed destined to be a record-breaker to just a normal yield of surplus honey.

There has been almost no bloom of any sort since clover. Brood-rearing has been light, and the colonies will go into winter quarters with old bees. This will mean spring-dwindling in 1012, unless the spring is very favorable.

Caribou, Maine, Sept. 25.

How to Make Good Fly-Paper

How to Make Good Fly-Paper

In these chilly days, when the flies flock to the screen door ready to poop in, how many of the readers of the American Bee Journal care to know that millions of them may be caught as follows:

Into half a pint of raw linseed oil kept hot in a water-bath, dissolve pulverized rosin until the compound is thick as syrup. Into tin pie-plates (which need not cost more than 2 cents each) put just enough of this mess to cover the bottom when the dish is heated, set it where the flies most congregate, and watch them stick. When the dish is filled with flies, pour boiling water into it, which will wash it out, when it is ready to be used again.

Buck Grove, Iowa.

Bee-Keeping in Hawaii

The bee-keepers of these islands have had The bee-keepers of these islands have had a very fair season, taking on an average about \$4.50 worth of honey per colony for the year's returns (gross), and as our colonies number about 20,000, it leaves a nice income to be divided among those interested. I have under my personal supervision 4250 colonies of bees.

The American Bee Journal contains much that is both interesting and useful.

Pearl City, Hawaiian Islands, Oct. 3.

Dry Weather-Watching Swarms Locate

Our bees have done fairly well this year, although we have had much dry weather. They did not swarm to the extent they generally do in the spring, but did well in gathering honey from crimson clover. Having moved my bees early last spring, about 3 miles, I lost a good many in their new location by weather changes, before they had gotten accustomed to their new fields.

I was not careful to remove hives made vacant by those that had died, and on going to the apiary one morning in May, I noticed some very dark bees that seemed very busy

Best Honey Season in Six Years

I have had the best season for honey in my 6 years of bee-keeping. My best colony produced % pounds—56 pounds of comb honey and 40 pounds of extracted. This is a splendid yield when one considers the extreme dearth of honey-flora in this vicinity.

I am with you for life, and do not want to miss a single number of the American Bee Journal.

WALTER E. ATKINSON.

Glendon, Md., Oct. 9.

miss a single number of Journal. WA Glendon, Md., Oct. 9.

Something for Beginners

Something for Beginners

I have kept bees on a small scale for about to years, or since I was about 12 years old, but I never had any success; in fact, I always had complete failures until about 4 years ago when I subscribed for the American Bee Journal. Through its columns I found the secret that I had been longing for —that of wintering bees in the cellar. Where I live is close to a creek, called "Coon Creek," It is extremely wet here, especially during the winter and spring months. My bees would die from the dampness in the hives during a cold spell in mid-winter, Of course, I think I could now remedy that since I have studied the business a little more, and consequently know little more than I did a few years ago. But I am getting off from my subject.

In the spring of 1061 had the good fortune of having 2 colonies of bees in the kind of hive that every beginner is so familiar with—the old box-hive. Thinking I would try the new kind of hive, or the frame hive, I accordingly went to a near-by city one afternoon, and purchased from an old bee-keeper two factory-made hives. One was an 8 and the other a 10-frame hive. I cleaned them up, for they were in bad shape, and got them in readiness for swarming.

June 3, a medium-sized swarm was cast. I put it in the 8-frame hive, and about a week later the other box-hive colony cast a large swarm also, and it was accordingly put into the to-frame hive. To my surprise and joy, I got so sections of nice comb honey from the 8-frame colony, which contained the medium-sized swarm; and 60 sections from the no-frame colony containing the large swarm. That settled it—no more box-hives for me; and as the smaller swarm in the 8-frame hive, and about a week later the other box-hive colony cast a large swarm. That settled it—no more box-hives for me; and as the smaller swarm in the 8-frame hive, and about a week later the other box-hive colony containing the large swarm. That settled it—no more box-hives for me; and as the smaller swarm in the 8-frame hive, and as the smaller swar

purpose quite as well as hives purchased from the factory. However, this article is not in the least intended to hurt, or throw any slurs against, the factory-made hives, but, on the other hand, it is for the benefit of beginners, and people who know how to handle the hammer and saw. I have for the past 2 years made 2-story hives without frames, sections, and labor, at a cost of 15 cents per hive.

frames, sections, and labor, at a cost of 15 cents per hive.

One day last winter I went to the city for the purpose of getting store-box lumber. On making a few inquiries one man told me to go back of his store and I could have any boxes to suit my taste for nothing, he being anxious to getrid of them. At another place I got 50 cents worth. Thinking I had secured enough, I set to work taking them apart, as I had previously found it no easy matter to haul a high load of dry goods boxes, etc. I also purchased 10 cents worth of nails, to work in with those I would secure from the lumber.

work in with those I would secure from the lumber.

From that 50 cents worth of lumber and 10 cents worth of nails I have since made 15 hives, each one consisting of the following. One hive-body, cap, bottom-board, and halfstory super, at the cost, without labor, of exactly 4 cents each. Now, remember, that this lumber consists mostly of ¾ and 1 inch stuff. If I would have purchased those 15½-story hives direct from the factory, I would have paid nearly \$30 for them; as I did the carpenter work during odd hours when outside work could not be done, such as rainy days, etc., I do not count the labor as much.

My favorite way of making hives is as follows: Cut the boards to the dimensions of an 8 or 10 frame hive, or whatever hive you prefer. I would advise you to have the endpieces one whole board.

To make a hanging place for the frames, I

pieces one whole board.

To make a hanging place for the frames, I take the end-boards and measure down from the top on the inside about ¼ inch, then I draw a line clear across the board, and by sawing half way through the thickness of the end-piece and chiseling it out from the top I have a fine place for the frames to hang on. (Remember this is done before nailing)

trames to hangon. (Remember this is done before nailing.)
Caution should be exercised in getting the exact measurements of a factory-made hive, or go by the kind of frames you intend

or go by the kind of frames you intend using.

Now, as to the supers, I believe the outside, or storm super, and the inside one to hold the sections are the best, as it leaves an air-space on top of the brood-chamber if properly fixed. Of course, it takes a little more lumber, but in the end I think I gain by it.

The season of zoro was not a very good one

by it.

The season of 1010 was not a very good one in this part of Iowa, as it was too dry, but from about 20 colonies, spring count, I secured 100 sections of fine white clover honey, and realized about \$100 for it, or about

honey, and realized about \$100 for it, or about \$5,00 per colony.

Bee-keeping in Iowa is not up to the standard that it ought to be, or at least in this (Iowa) county in which I live, and Benton county to the north. There are hardly a half-dozen bee-keepers that are up with modern methods of keeping bees, although there are tons of honey going to waste every year. So honey in this part of Iowa is a scarce article, but all the better for me, as I have ready sales for my honey in the home market.

market.

The way I dispose of my honey is this: As soon as I have a couple hundred pounds of honey on hand, and as I live on the main road, and my apiary is close to the road, I put up a sign which reads, "HONEY FOR SALE." The result is, that people from near-by towns make special trips for my honey, for, as a rule, I do not do any delivering.

honey, for, as a rule, and the first the honey season for 1010 was over, it being about July 15, I closed out the entire 1100 sections in 15 days. I had the money in my hands, and the fortunate customers were happy with their "winter supply of honey," as some called it.

Blairstown, Iowa.

[Unless the ordinary bee-keeper is an extraordinarily good carpenter, the hives he will make from second-hand store-boxes will not compare with the factory-made hives. The successful commercial bee-keeper, who uses hives by the hundred, would never think of wasting his valuable time in such work. However, where a beekeeper doesn't care, and hasn't anything else to do, and also has good store-boxes given to him-why, of course, he can save a little money by working over such boxes into hives that will answer the purpose. But we dare say that very few will have either the time or the natience to do it. We would personally, take the accurately-made factory hives every time, as they will last a life-time, and are ever so much better than would be the hives that we could make from storeboxes.-EDITOR.]

Season in Tennessee-Requeening

The years of 1000 and 1010 were both bad here, almost a famine for bees; but 1011 was very good, but the trouble was there were no bees to gather the honey. They got rich by Aug. 1st, but a very small percent was able to gather surplus honey, owing largely to the discouragement of bee-keepers in the two bad seasons of 1000 and 1010. Bee-keepers should see that they have plenty of bees and no honey, to having no bees and plenty of honey.

Another thing that is very important to

of honey.

Another thing that is very important to the bee-man, is to introduce new blood in the apiary every 6 or 8 years, by buying one or more queens some 100 or more miles away. This gives the bees more vigor, and more energy for some time. But rear queens from the queen producing the best of workers, as we don't care so much for beauty of late years.

I don't think it will

ers, as we don't care so much for beauty of late years.

I don't think it will pay to buy queens to supply an apiary, but buy a queen and rear the rest from her, as that will give a complete cross of blood. My way is, to rear my queens just before the close of the honey-flow from sourwood, as I don't care for the bees to be queenless at a time when they will have no work to do.

Queens that are brought from a distance are very often injured in the mails, and soon die. I have had them to lay only 4 or 5 days and then die, while the longest I have had lived 2 years. I have bought several queens in the spring, and they would disappear by fall. So the best plan is to rear queens at once from a shipped queen, which should be a tested one.

R. A. Shultz.

Cosby, Tenn., Oct. 20.

The Ontario Convention.—The annual convention of the Ontario Bee-Keepers' Association will be held in the York County Council Chambers, Wednesday to Friday, Nov. 15, 16 and 17, 1911, in Toronto, Ont. A very interesting program has been prepared for those who attend, a copy of which may be had by addressing the secre-tary, P. W. Hodgetts, Toronto, Ont. Special railroad rates have been secured. Any one desiring to attend this leading convention of Canada should send for the program, which gives all necessary information.

Illinois State Convention .- The Illinois State Bee-Keepers' Association will hold its 21st annual meeting in the State House at Springfield, on Thurs-day and Friday, Nov. 23 and 24, 1911.

The railroad fare, being but 2 cents a mile, is the same as one fare and a third for the round trip, when we used to pay 3 cents per mile. And there should be no one to stay away if we do not succeed in getting a better rate on account of I. O. O. F. meeting the same

The Executive Committee are endeavoring to get Dr. C. C. Miller, of Marengo, Ill., George W. York, of the American Bee Journal and President of the National Association, and W. B. Moore, of Altona, Ill., as well as others, on the program.

In consideration of all the long-continued work of the Illinois State Association in obtaining the foul brood law, we all, as members of the same, ought surely to get together and have a great JAS. A. STONE, Sec. love feast.

Springfield, Ill., Rt. 4.

The Eastern Illinois Convention.—The 4th annual meeting of the Eastern Illinois Bee-Keepers' Association will be held in the Christian Church at Watseka, Ill., Nov. 14 and 15, 1911, beginning at 10:30 a.m. The program contains an interesting list of questions for discussion. All who are interested should send for a copy of the program to the secretary, H. S. Duby, St. Anne, Ill. This is one of the most helpful and interesting bee-keepers' conventions held in Illinois, and should be well attended. We had the pleasure of being there last year when it met at St. Anne, and enjoyed it very much. The president of the association, Mr. J. H. Roberts, lives at Watseka, and we are very certain that the coming meeting will be one of the best ever held in eastern Illinois.

The Colorado Convention.—The Colorado State Bee-Keepers' Association will hold its convention Dec. 12 and 13, 1911, at the Auditorium Hotel, 14th and Stout Sts., Denver, Colo. There will be a rate of one fare for the round trip, good from Dec. 8 to 15. (The American National Live Stock Association meets at the same dates, so those interested may attend both con-ventions.) There will be sessions devoted to freight-rates, foul brood, grading honey, selling, etc. This convention will be one of discussion rather than set speeches or papers prepared in advance. The Auditorium Hotel has placed its Convention Hall, seating 175, at our disposal.
WESLEY FOSTER, Sec.

Boulder, Colo.

Pennsylvania Convention. - The annual meeting of the Pennsylvania State Bee-Keepers' Association will be held in the Court House at Lancaster, Pa., Dec. 1 and 2. This promises to be the most important meeting yet held. Every bee-keeper is invited to be pres-Matters of interest will come up for discussion. An examination for volunteer apiary inspectors will be held at the same time. H. C. KLINGER, Sec. Liverpool, Pa.

"Meadows and Pastures," by Joseph E. Wing, a staff correspondent of the Breeders' Gazette, is the title of a cloth-bound book of 418 pages, devoted to a study of the production, development and care of grasses, as re-lated to meadows and pastures. Mr. Wing made investigations in every State and several foreign countries, besides thoroughly studying the scant literature of the subject. The sev-eral pages devoted to sweet clover is the first complete defense of this clover that we have seen in book form. Its growing is encouraged and its value described. This book gives definite instructions concerning every view of the subject. It is fully illustrated, and certainly should be in the hands of every farmer of this country. The postpaid price is \$1.50, or we club it with the American Bee Journal for a year— both for \$2.30. Send all orders to the American Bee Journal, 117 North Jefferson St., Chicago, 111.



Wants, Exchanges, Etc.

[Advertisements in this department will be inserted at 15 cents per line, with no dis-counts of any kind Notices here cannot be less than two lines. If wanted in this de-partment, you must say so when ordering.]

For SALE.—Bees, honey, and bee-supplies. We are in the market for beeswax and honey. 5Atf Ogden Bee & Honey Co., Ogden Utah.

Wanted-Early orders for the Old Relia-able Bingham Bee-Smokers. Address. 12Atf T. F. Bingham, Alma, Mich.

FOR SALE—White and Amber Extracted Honey in 60-lb. tin cans.
Wm. Ehlert, Vesper, Wis.

FOR SALE.—Thirty-five colonies of Bees, all colonies strong and in good condition.
Inquire of J. D. Holdener, Carlyle, Ill.

HONEY FOR SALE.—Choice white clover and raspberry honey. Thick and well ripen-ed, with a delicious flavor. Write for prices. D. H. Welch, 834 Park Ave., Racine, Wis.

BARNES Foot-Power Circular Saw. used but very little: cost \$35; will sell for \$25. Must sell by Dec. 15th. R. E. Hammond, Rt. 1, Heath Springs, S. C.

FOR SALE—250 Business Size Bond Envelopes, and 250 Bond Letter-Heads, printed to order for \$1.00. Samples free.
Walter G. Collins, R. D. 3, Cohocton, N. Y,

INDIAN RUNNER Duck Culture Book. Information that beginners are looking for, (Special price, 50 cents.) Catalog for two stamps.

8A5t Levi D. Yoder, Box 44, Dublin, Pa.

FOR SALE-Empty second-hand 60-lb, cans, as good as new; two cans to a case, at 25c per case. C. H. W. Weber & Co... 2146 Central Ave., Cincinnati, Ohio.

SECOND-HAND CANS—Good ones, two 5-gal. in a box—5 boxes at 45 cts. a box; 10 boxes at 40 cts. a box; or 20 boxes at 35 cts. a box. Ad-dress, George W. York & Co., 117 N. Jefferson St., Chicago, Ill.

Colonies of Italian bees in L. hives. 10-fr., built on full brood-fdn., wired, body and sh. super, redw., dovet., 3 coats white, sheeted lids, each neat, modern and full-stored—any time. Jos. Wallrath, Antioch, Cal. 2A11

THE BEE-KEEPERS' REVIEW.— Have you read it? Just the journal for both the beginner and expert. Tells the former in plain simple language just what the latter are doing. Helps the latter by giving all the latest methods. Send 15 cts. in stamps for three months' trial subscription, Agents wanted in all localities. Subscription price, \$1.00 per year.

E. B. Tyrrell,

Editor and Publisher,
10Aff 230 Woodland Ave., Detroit, Mich,

FOR SALE—I will sell the following list of bee-papers, and also 3 or 4 trios of Indian Runner Ducks for \$3.00 per trio. Vols. of American Bee Journal for 1004 and 1005, 50 Nos. of 1006, 28 Nos. of 1007, 10 Nos. of 1008, whole Vol. of 1010. Gleanings—22 Nos. of 1007, 16 Nos. of 1008, 22 Nos. of 1002, 22 Nos. of 1002, 22 Nos. of 1004, 11 Nos. of 1006, all Nos. for 1003 and 1010. Bee-Keepers' Review—10 Nos. of 1010, 7 Nos. of 1005, 12 Nos. of 1004, 7 Nos. of 1005, and 20 Nos. with dates running from 1890 to 1890. Edwin Bevins, Leon, Iowa.

SUPERIOR BEE-SUPPLIES

Specially made for Western bee-keepers by G. B. Lewis Co. Sold by

Colorado Honey-Producers' Association, DENVER, COLO.

"Bees and Honey"—the book by Thos. G. Newman—is almost out of print, but we have a few copies left (cloth bound) at 50 cents each. Do you want one? Address the office of the American Bee Journal.

Orders Booked for 1912 for **Untested Italian Queen-Bees**

Our Standard-Bred 6 Queens for \$4.50; 3 for \$2.50; 1 for 90 cents.

For a number of years we have been sending out to bee-keepers exceptionally fine Untested Italian Queens, purely mated, and all right in every respect. Here is what a few of those who received our Queens have to say about them:

GEORGE W. YORK & Co.:—The two queens received of you some time ago are fine. They are good breeders, and the workers are showing up fine I introduced them among black bees, and the bees are nearly yellow now, and are doing good work.

Nemaha Co, Kan, July 15.

A. W. SWAN.

GEORGE W. YORK & Co.:—After importing queens for 15 years you have sent me the best. She keeps 9 1-2 Langstroth frames fully occupied to date, and. although I kept the hive well contracted. to force them to swarm, they have never built a queen-ceil, and will put up 100 pounds of honey if the flow lasts this week.

Ontario, Canada July 22.

CHAS, MITCHELL

GEORGE W. YORK & Co.:—The queen I bought of you has proven a good one, and has given me some of the best colonies.

Washington Co., Va., July 22.

N. P. OGLESBY.

GEORGE W YORK & Co.:—The queen I received of you a few days ago came through O. K. and I want to say that she is a beauty. I immediately introduced her into a colony which had been queenless for 20 days. She was accepted by them, and has gone to work nicely. I am highly pleased with her and your promptness in filling my order. My father, who is an old bee keeper, pronounced her very fine. You will hear from me again when I am in need of something in the beeline.

Marion Co., Ill., July 13.

We usually begin mailing Queens in May, and continue thereafter on the plan of "first come first served." The price of one of our Untested Queens alone is 90 cents, or with the old American Bee Journal for one year-both for \$1.60. Three Queens (without Journal) would be \$2.50. or 6 for \$4.50. Full instructions for introducing are sent with each Queen, being printed on the underside of the address-card on the mailing-cage. You cannot do better than to get one or more of our fine Standard-Bred Queens.

George W. York & Co.,

Chicago, Ill.

Please mention Am. Bee Journal when writing.

Honey to Sell or Wanted

Wanted — Choice extracted white and amber honey in barrels or cans. Send sam-ple, and price delivered f. o. b. Preston. 11Atf M. V. Facey, Preston, Minn.

WILL PAY for early shipments of good flavored clean honey. Extracted, 60-lb. cans, 8c. Comb in sections, frames or boxes, 15c net weight. F. O. B. Baxter Springs, Kan. 3Atf O. N. Baldwin

FOR SALE. — Absolutely pure California sage extracted honey; several cars white and light amber in 60-lb tins, two tins to a case. Write us for samples and prices.

Rather Bros., Managers,
Hemet Valley Bee-Keepers' Association,
7Atf Hemet, Cal

Honey for Sale—We have some of the Finest Water-White Alfalfa Honey in 60-lb. cans, two in a box, at 11c a pound; 4 or more cans, at 10½c, 10 or more cans at 10½c. We have some other fine Extracted Honey, put up in the same way, but not quite so white, at ½c less per pound. A good sample of either kind for 10 cts., which amount can be deducted from your first order. Address, George W. York & Co.,

117 North Jefferson St., Chicago, Ill.

"Advanced Bee-Culture." — A new edition of this book, by the late W. Z. Hutchinson, of Michigan, is one of the practical and up-to-date books for the specialist bee-keeper ever written. Its 200 pages touch on nearly 500 subjects pertinent to modern bee-keeping, and all are discussed authoritatively. It has many fine illustrations. It is bound in attractive and substantial cloth, with a clover design in natural colors on its cover. All together it is a volume whose appearance and unquestionable worth justly entitles it to a place in the library of every bee-keeper. No more important work on the subject has appeared. It is mailed for only \$1.00, or with the American Bee Journal one year—both for \$1.80. Send all orders to the office of the American Bee Journal, 117 North Jefferson Street, Chicago, Ill.

FOR SALE-Duston White Wyandottes, \$2; 15 eggs, \$1; \$5 per 100.

Elmer Gimlin, Taylorville, Ill. HAIY

OWARD

MELBE

HONEYVILLE,

SPECIAL CLUBBING AND PREMIUM OFFERS

AMERICAN JOURNA

Sample copies free, to help you interest your friends and get subscriptions. If you will send us names of your neighbors or friends we will mail them sample copies free. After they have received their copies, with a little talk you can get some to subscribe and so either get your own subscription free or receive some of the useful premiums below. They're worth getting. We give you a year's subscription free for sending us 3 new subscriptions at \$1.00 each.

BEE-KEEPERS' NOVELTY POCKET-KNIFE

Your name and address put
on one side of the handle as
shown in cut, and on the
other side pictures of
a queen-bee, a worker,
and a drone. The
handle is celluloid
and transparent,
through which is
seen your name.
If you lose this
knife it can be returned to you, or
serves to identify
you if you happen
to be injured fatally, or are unconto be injured fatally, or are unconscious. Cut is exact size. Be sure to write exact name and address. Knife delivered in two weeks. Price of knife alone, postpaid, \$1.10. With year's subscription, \$1.90.

Free for 3 new \$1 subscriptions.

new \$1 su scriptions.

BEE-KEEPER'S FOUNTAIN PEN

A really good pen. As far as true usefulness goes it is equal to any of the higher-priced, much-advertised pens. If you pay more it's the name you're hargedfor the company of the pared for the same of the page of the same of the same

advertised pens. If you pay more it's the name you're Charged for. The Gold Nit Is guaranteed 14 Karat gold, Irici ium pointed. The holder is hard-rubber, handsomely finished. The cover fits snugly and ca't slip off because it slightly w dges over the barrel at either end. This pen is non-leakable. It is very easily cleaned, the penpoint and feeder being quickly removed. The simple feeder gives a uniform supply of ink to the pen-point without dropping, blotting or spotting. Every beekeeper ought to carry one in his vest-pocket. Comes in box with directions and filler. Each pen guaranteed. Here shown % actual size.

Price alone, postpaid, \$1.00. With a year's subscription, \$1.70. Given free for 3 new subscriptions at \$1.00 each.

QUEEN-CLIPPING DEVICE

The Monette Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. 4% inches high. It is used by many bee-keepers. Full printed direc-tions sent with each

one. Price alone, post-paid, 25 cents. With a year's subscription, Given free for 2 new subscriptions at \$1.00. each.

IDEAL HIVE-TOOL

A special tool invented by a Minnesota beekeeper, a dapted for prying up supers and for general work around the apairy. Made of malleable iron, 8½ inches long. The middle part is 11-16 inches wide and 7-32 thick. The smaller end is 17-8 inches long, 112 inch wide, and 7-32 thick, ending like a screw-driver. The larger end is wedge-shaped having as harp, semi-circular edge. shaped having a sharp, semi-circular edge, making it almost perfect for prying up covers, supers, etc., as it does not mar the wood. Dr. Miller, who has used it since 1903 says, January 7, 1907; "I think as much of the tool as ever."

Price alone, postpaid, 40cents. With a year's subscription, \$1.20. Given free for 2 new subscriptions at \$1.00 each.

> PREMIUM **OUEENS**

These are untested, standard-bred, Italian Queens, reports of which have been highly satisfactory. They are active breeders, and produce good workers.

ers.
Sent only after May 1st.
Orders booked any time
for 1908 queens. Safe delivery guaranteed. Price,
90 cents each, 6 for \$4.50.
or 12 for \$8.50. One queen
with a year's subscription, \$1.60. Free for
2 new \$L subscriptions.

Exactly half actual

HUMOROUS BEE POST-CARDS



A "Teddy Bear" on good terms with everybody including the bees swarming out of the old-fashioned "skep." Size 3/4 x5%, printed in four colors. Blank space 1½ x3 inches is for writing. Prices—3, postpaid, 10 cents; 10 for 25 cents. Ten with a year's subscription, \$1.00. 6 given free for one \$1.00 subscription.

BOOKS FOR BEE-KEEPERS

Forty Years Among the Boes, by Dr. C. C. Miller.—334 pages, bound in handsome cloth, with gold letters and design, illustrated with 112 beautiful half-tone pictures, taken by Dr. Miller. It is a good, live story of successful bee-keeping by one of the masters, and shows just how Dr. Miller works with bees. Price alone, \$1.00. With a year's subscription, \$1.75. GYEN FHEE for 3 new subscriptions at \$1.00 each.

Advanced Bee-Culture, by W. Z. Hutchinson.—The author is a practical and helpful writer. 830 pages; bound in cloth, beautifully illustrated. Price alone, \$1.20. With a year's subscription, \$1.90. GIVEN FREE for 8 new subscriptions at \$1.00 each.

ABC&XYZ Of Bee Culture, by A. I. & E. R. Root.—Over 500 pages, describing everything pertaining to the care of honey-bees. 400 engravings. Bound in cloth, price alone, \$1.50. With a year's subscription, \$2.25. Given FREE for 5 new subscriptions at \$1.00 each.

for 5 new subscriptions at \$1.00 each.

Scientific Queen-Rearing, as Practically Applied, by G. M. Doolittle.—How the very best queens are reared. Bound in cloth and illustrated. Price alone, \$1.00. With a year's subscription, \$1.50. GIVEN FREE for 2 new subscriptions at \$1.00 each. In leatherette binding, price alone, 75 cents. With a year's subscription, \$1.25. GIVEN FREE for 2 new subscriptions, \$1.00 each.

Bee-Keepers' Guide, or Manual of the Apiary, by Prof. A. J. Cook.—This book is instructive, helpful, interesting, thoroughly practical and scientific. It also contains anatomy and physiology of bees. 544 pages, 295 filustrations. Bound in cloth. Price alone, \$1.20. With a year's subscription, \$1.90. Given free for 4 new subscriptions at \$1.00 each.

Langstroth on the Honey-Bee, revised by Dadant.—This classic has been entirely rewrit-ten. Fully illustrated. No apiarian library is complete without this standard work by "The Father of American Bee-Culture." 520 pages, bound in cloth. Price alone, \$1.20. With a year's subscription, \$2.00. Given free for 4 new sub-scriptions at \$1.00 each.

scriptions at \$1.00 each.

The Honey-Money Stories.—64-page booklet of short, bright items about honey. Has 33-fine illustrations, and 3 bee-songs. Its main object is to interest people in honey as a daily table article. Price 25 cents. With a year's subscription, \$1.10. Given free for one new subscription at \$1.00. Three copies for 50 cents; or the 3 with a year's subscription. \$1.30; or the 3 copies Given free for 2 new subscriptions at \$1.00 each.

\$1.00 each.

Amerikanische Bienenzucht, by Hans Buschbauer, is a bee-keepers' handbook of 138 pages, which is just what our German friends will want. It is fully illustrated and neatly bound in cloth. Price alone, \$1.00. With a year's subscription, \$1.70. GIVEN PREE for 3 new subscriptions at \$1.00 each.

THE EMERSON BINDER

A stiff board outside like a book-cover with cloth back. Will hold easily 3 volumes (86 numbers) of the American Bee Journal. Makes reference easy, preserves copies from loss, dust and mutilation. Price, postpaid, 75 cents. With a year's subscription. 1.50. Given Free for 2 new subscriptions at \$1.00 each.

WOOD BINDER

Holds 3 volumes. Has wood back but no covers. Price, postpaid, 20 cents. With a year's subscription \$1.10. GIVEN FREE for one new subscription at \$1.00.

BEE-HIVE CLOCK

A few of these handsome "bronze-metal" clocks left. Base 10 1-2 inches wide by 9 3-4 inches high. Design is a straw skep with clock face in middle. Keeps excellent time, durable and reliable. Weight, boxed, 4 pounds. You pay express charges. Price, \$1.50. With a year's subscription, \$2.26. GIVEN FREE for 5 new subscriptions at \$1.00 each.

George W. York & Co., 117 North Jefferson St., Chicago, III.

BINGHAM

BEE SMOKER



American Bee Journal



THE * DITTMER * WAY

Is to have your Wax worked into Comb Foundation by the

DITTMER PROCESS

This is a saving over the old way of selling your Wax and then buying your Comb Foundation. Send us a postal asking for further information.

A very Liberal Discount is offered on Early Orders for All Bee-Supplies.

Gus Dittmer Company, - Augusta, Wisconsin.

HAND-MADE SMOKERS

Extracts from Catalogs-1907:

Chas. Dadant & Son, Hamilton, Ill.—This is the Smoker we recommend above all others.

u. B. Lewis Co., Watertown, Wis.—We have sold these Smokers for a good many years and never received a single complaint.

A. I. Root Co., Medina, Ohio.—The cone fits inside of the oup so that the liquid creosote runs down inside of the smoker.

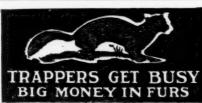
All Bingham Smokers are stamped on the tin, "Patented 1878, 1892, and 1903," and have all the new improvements.

Smoke Engine—largest smoker made \$1.50—4
Doctor—cheapest made to use ... 1.10—3½
Conqueror—right for most apiaries 1.00—3
Large—lasts longer than any other ... 90—2½
Little Wonder—as its name implies ... 65—2 inch stove

The above prices deliver Smoker at your post-office free. We send circular if requested. Original Bingham & Hetherington Uncapping-Knife.

T. F. BINGHAM, Alma, Migh.





Over ten million dollars will be paid to trappers of fur bearing animals during the coming winter. Any man or boy living in the country can add a goodly sum to his earnings by trapping during spare moments. We furnish ABSOLUTELY FREE acomplete Trappers Guide which tells you the size of trap and kind of bait to use for the different animals, how to remove the skins and prepare them for market. We also furnish the best traps and baits at lowest prices. We receive more furs direct from trapping grounds than any other house in the world, therefore can pay the highest prices for them. Our price lists, shipping tags, etc., are also FREE for the asking. If you are a trapper or want to become one, write to us today. We will help you.

F. C. TAYLOR & CO. GREATEST FUR HOUSE IN THE WORLD O Fur Exchange Building, St. Louis, I "Griggs Saves You Freight"

TOLEDO

Is the point to get Goods Quick and at least

6 Per Cent Discount

This month. Send list of Goods needed and let us figure with you. Can take **Honey and Wax** in exchange for Supplies.

S. J. GRIGGS & CO.,

24 N. Erie St., TOLEDO, O.

"Griggs The King-Bee."

Back Vols. American Bee Journal

BACK VOLUMES OF AM. BEE JOURNAL.—We have some on hand, and would be glad to correspond with any one who may desire to complete a full set. It may be we can help do it. Address, American Bee Journal.

117 N. Jefferson St., Chicago, Ill.

"First Lessons in Bee-Keeping" on another page.

An English Honey-Spoon



Over in old England they have a handy honey-spoon, or at least a spoon that has a device in its handle that will prevent it from dropping down in the jar of honey on the dining table, thus soiling the fingers and spoiling the fingers and spoiling the table-cloth. It is a very ingenious idea, and should have extensive demand among honey-consumers, especially bee-keepers. It is well plated on high-class nickel, and has a beautiful raised design on the upper side of the handle, as indicated in the picture herewith. We have secured some of these very unique spoons, and will mail them at 90 cents each. Or, we will send spoon and the American Bee Journal one year—both for \$1.75.

The spoon would be fine as a gift for Christ-

The spoon would be fine as a gift for Christ-mas, birthdays, etc.

mas, birthdays, etc.

The editor of the Bee Journal has used one of these spoons for a number of months in the honey-glass which is albe without this spoon again, as it is so convenient, and also unusual in this country. We can fill orders promptly now. You certainly would be pleased with this honey-spoon, and so would any one to whom you might present it. Send all orders to,

GEORGE W. YORK & CO., - CHICAGO, ILL.

Please mention Am. Bee Journal when writing.

Early Christmas Shopping

It is all very well to talk about early Christmas shopping, but nine out of ten of us have not the early Christmas shopping wherewithal. What with shoes for Johnnie, and a coat for Susan, and gentle reminders from the coalman and other trusting ones, most of us come bump up against the week before Christmas before we can spare a cent for Christmas doings. Then the question is, What? The stores are jammed, there are heaps of foolish notions to catch the belated shopper.

what? The stoles are jaimled, there are heaps of foolish notions to catch the belated shopper.

And yet how easy it is to get just the right thing at a modest cost, namely, a year's subscription to The Youth's Companion!

It costs \$1.75, and how can you invest \$1.75 to better advantage if you wish to make a gift that will benefit as well as gratify the friend or family to whom you send it? And if you can subscribe early, you get just so much more for the money—all the issues for the remaining weeks of joir free.

Then, too, your present will be as fresh and pleasing a year from now as on Christmas morning, and of how many presents can that be said?

The one to whom you give the subscription will receive free The Companion's Calendar for 1012, lithographed in ten colors and gold, and you, too, as giver of the subscription, will receive a copy of the Calendar.

Only \$1.75 now for the 52 weekly issues,

Only \$1.75 now for the 52 weekly issues, but on January 1, 1012, the subscription price will be advanced to \$2.00.

THE YOUTH'S COMPANION, 144 Berkeley St., Boston, Mass.

New Subscriptions Received at the Office of the American Bee Journal.



Tennessee-Bred Queens

All from Extra-Select Mothers. Davis' Best, and the **Best Queens Money Can Buy**

39 Years' Experience in Queen-Rearing. Breed Three-Band Italian Queens Only.

July 1 to Nov. 1			Nov. 1 to July 1						
Untested	5.00 8.00	9.00 15.00	I.25 I.75	\$ 5.00 6.50 9.00	\$ 9.00 12.00 17.00	Nuclei-no	eder que	en—I-fr, 2-fr. 3-fr.	\$10.00 5.00 2.00 3.00 4.00 8.00

Select the Queen wanted and add her price to the price of the Nucleus or Full Colony.

For Queens to be exported, add 20 percent to above prices, except to Canada, Cuba or Mexico.

All Contracts have now been filled, and I am at last ready to serve you promptly.

JOHN M. DAVIS.

Dealer in, Importer and Breeder of

Italian Queen-Bees

Depot, Telegraph & Express Offices-Ewell Sta. on L. & N.Ry. SPRING HILL, TENN.

Celluloid Queen-Buttons

These are very pretty things for bee-keepers or honey-sellers to wear on their coatlagels. They often serve to introduce the subject of honey, which might frequently lead to a sale.



NOTE. — One bee-keeper writes: "I have every reason to believe that it would be a very good idea for every beekeeper to wear one [of these buttons], as it will cause people to ask questions about the busy bee, and many a conversation thus started wind up with the sale of more or less honey; at any rate it would give the beekeeper a superior opportunity to enlighten many a person in regard to honey and bees."

The picture shown above is a reproduc-

The picture shown above is a reproduction of a motto queen-button that we offer to bee-keepers. It has a pin on the underside to fasten it.

PRICES—by mail—I for 6 cts.; 2 for 10 cts.; or 6 for 25 cts. Address,

- GEORGE W. YORK & CO. CHICAGO, ILL.

Please mention Am. Bee Journal when writing.

MAKE HENS LAY

feeding raw bone. Its egg-producing es that of grain. Eggs more fertile, prous, broilers earlier, fowls heavier

MANN'S LATEST Bone Cutter

Cuts all bone with adhering meat and gristle. Never clogs. 10 Days' Free Trial. No money in advance.

Send Today for Free Book.
F. W. Mann Co., Box 348, Milford, Mass.

Please mention Am. Bee Journal when writing.

American Bee Journal Binder!



The Emerson Binder is perhaps the best and most convenient of all Binders that are made for holding the copies of various publications as they come from week to week or month to month. Those we have for the American Bee Journal are stiff mottled pasteboard with cloth back. They are very strong and durable. One of these Binders will hold the American Bee Journal for 3 years, and the price is only 75 cents, postpaid: or we will send a Binder with a year's subscription to the American Bee Journal—both for \$1.60.

GEORGE W. YORK & CO.,

117 N. Jefferson St.

CHICAGO, ILL.

The Superior

Necessity on Every Farm and in Every Household

The Superior Wrench will immediately grip and hold any nut, pipe or bolt, no matter what the shape, condition or size, up to its full opening capacity.

This wrench is always ready, and needs no adjustment for any size or shape whatever. You can readily understand its working principle from the illustration.

USE IT on badly disfigured nuts, corner all off, and where nothing but a cold-chisel and hammer have been effective heretofore; the Superior Wrench is the best, and will take off or tighten up any nut in such condition, and do it quickly.

As a Farm Wrench the Superior Wrench has no equal. It will grip any nut or bolt on the binder, mowing machine, or any piece



of farm machinery, and something the farmer will appreciate is this. Did you ever find a bolt that persisted in turning when you were trying to remove a nut? Try the Superior Wrench on it. It will hold it every

time.

In operating this wrench it is not necessary to use both hands. If you do use both hands, place one on the heel of the loose jaw and not on the point. By simply setting the loose jaw up against the nut or pipe you wish to grip, drawing the handle to you, the wrench takes hold, and the harder you pull the tighter it grips.

The Superior Wrench is one of the most convenient HOUSEHOLD TOOLS you have ever seen. A woman can use it, and she does use it in many ways.

We mail the Superior Wrench for 70 cents:

We mail the Superior Wrench for 70 cents; or with the American Bee Journal for one year—both for only \$1.50. Or, we will mail it free as a premium for sending us two new subscribers for the American Bee Journal for one year with \$2.00 to pay for same. Address,

George W. York & Co. 117 N. Jefferson St., Chicago, III.

Bee-Supplies

We are Western Agents for-

IAtf "FALCONER"

Write for Fall Discounts-we can save you

C. C. Clemons Bee-Supply Co. 128 Grand Ave., Kansas City, Mo. Please mention Am. Boe Journal when writing.

"Bee-Keepers' Guide"

This book on bees is also known as the "Manual of the Apiary." It is instructive, interesting, and both practical and scientific. On the anatomy and physiology of the bee it is more complete than any other standard American bee-book. Also the part on honeyproducing plants is exceptionally fine. Every bee-keeper should have it in his library. It has 544 pages, and 295 illustrations. Bound in cloth. Price, post-paid, \$1.20; or with a year's subscrip-tion to the American Bee Journal—both for \$1.90. Send all orders to the office of the American Bee Journal,



Are You Good at Figures?

These Books would help you much

Practical Brief Figuring

Makes figuring easy and attractive. It contains "short cuts" for the merchant, manufacturer, mechanic and farmer, besides a treatise on the Civil Service Examination in arithmetic.

Freaks of Figures

Is a collection of interesting and very amusing mental diversions for parlor entertainments and social gatherings for old and young. Both of these books are printed on an excellent quality of paper, and neatly bound.

We have completed arrangements with the author by which these books may be secured by all subscribers of the American Bee Journal at a nominal figure as follows:

Journal at a nominal light east of lows:
We will send you the American Bee Journal for one year and a copy of either "Practical Brief Figuring" or "Freaks of Figures," prepaid, for \$1.30.
We will send you the American Bee Journal for one year and a copy of both books, prepaid, on receipt of \$1.70.
These offers are good for new

subscriptions and renewals.

The postpaid price of "Practical Brief Figuring" is 60c; of "Freaks of Figures," 50c.



George W. York & Co., 117 N. Jefferson St., Chicago, III.

First Lessons in Bee-Keeping" PAGE Poultry Profits bring the largest profits – 100% more Doubled profits — 100% more
than other poultry. Caponizing is easy and soon
learned. Capons sell for
30c. a pound, while ordinary poultry brings only 15c. a pound.
Progressive poultrymen know
these things and use PILLING CAPONIZ-

Sent postpaid, \$2.50 per set with
"Easy-to-use" instructions.
We also make Prattry
Gape worm Extractor, 25c Frenche, 50c. Booklet, "Guide for Capoulsing," FREE. G. P. PILLING & SON CO., 23d & Arch Sts., Philadelphia, Pa.

Please mention Am. Bee Journal when writing.

Souvenir Bee Postal Cards

We have 4 Souvenir Postal Cards of interest to bee-keepers. No. 1 is a Teddy Bear card, with stanza of poetry, a straw bee-hive, a jar and section of honey, etc. It is quite sentimental. No. 2 has the words and music of the song, "The Bee-Keeper's Lullaby;" No. 3, the words and music of "Buckwheat Cakes and Honey;" and No. 4, the words and music of "The Humming of the Bees." We send these cards, particular as followers: A cards for 10 postpaid, as follows: 4 cards for 10 cents, 10 cards for 20 cents; or 10 cards with the American Bee Journal one year for \$1.10. Send all orders to the office of the American Bee Journal.

FREE Booklets for Bee-Keepers!

Make good use of your spare time this Winter. Get a better honey crop by fitting yourself to be a better beekeeper. The booklets named below are sent, free of charge, to our friends who request them. Each is of considerable value to the apiarist who is interested in the particular phase of the work treated. You may have all of them, if you desire. Perhaps you have a friend who would like copies, too.

Here are a Few Titles:

FACTS ABOUT BEES

or the Danzenbaker Hive and its management. 60 pages illustrated from photographs.

THE BUCKEYE HIVE

Wintering bees in the double-walled hive. 76 pages-

BEE-KEEPER AND FRUIT-GROWER

How and Why their interests are mutual. New edition. 24 pages.

HOW TO PRODUCE EXTRACTED HONEY

Explains in detail complete process of honey production. 44 pages—illustrated. process of extracted

Other interesting booklets and the leading text-books on bee-keeping are listed in our catalog of bee-keepers' supplies. Better refer to these and "study-up" in your spare moments.

We have prepared a 16-page catalog of Money Saving Combination on Magazines, Books, and Useful articles with GLEANINGS IN BEE CULTURE. These apply for new and renewal subscriptions alike. Send postcard for the catalog.

NOVEMBER Early Order Discount is 5 Percent

Save 5 cents on every dollar you will invest in supplies for next season by sending your order in **Now.** You know the quality of **Root's Standard Bee-Supplies**—you know we will treat you right. Go through our catalog carefully and get up an early order—we've made it worth while.

This discount applies to goods listed in our general catalog except as follows: Paint, Porter bee-escapes, Bingham smokers, bees, queens, printed matter, cartons, honey-packages, tin and glass, bushel boxes, hot-bed sash, honey-labels, seeds and such seasonable goods. Where a large general order includes some of the excepted articles, not exceeding Ten to Twenty Percent of the entire order, the discount may be applied to the whole order.

THE A. I. ROOT COMPANY, 213 Institute Place, Chicago, Illinois

R. W. BOYDEN, Mgr.

(Jeffrey Building)

Tel. 1484 North.





DOOLITTLE'S "Scientific Queen-Rearing"

This is G. M. Doolittle's master-piece on rearing the best of queens in perfect accord with Nature's way. It is for the amateur and the veteran in bee-keeping. The A. I. Root Co., who ought to know, say this about Doolittle's queen-rearing book:

"It is practically the only comprehensive book on queen-rearing now in print. It is looked upon by many as the foundation of modern methods of rearing queens wholesale."

Mr. Doolittle's book also gives his method of producing comb honey, and the care of same; his management of swarming, weak colonies, etc. It is a book of 126 pages, and is mailed at the following prices: Bound in cloth, \$1.00; bound in leatherette., 75, cents.

Special Clubbing Offer

We offer a cloth-bound copy of this book with the American Bee Journal one year—both for \$1.50; or a copy of the leatherette-bound edition, with the American Bee Journal one year—both for \$1.25. The cloth-bound book given free for getting 3 new subscribers at \$1. each; or the leatherette-bound copy given for 2 new subscribers.

Every bee-keeper should have a copy of Mr. Doolittle's book, as he is one of the standard authorities of the world on the subject of queen-rearing and everything else connected with bee-keeping and honey-production,

George W. York @ Co.,

Chicago, Ill.

B. A. Hadsell, one of the most experienced and largest bee-keepers in the world—has made six trips to Mexico, investigating that place as a bee-country, and is so infatuated with it that he is closing out his bees in Arizona. He has been to great expense in getting up a finely illustrated 22-page booklet, describing the tropics of Mexico as a Bee-Man's Paradise, which is also superior as a farming, stock-raising and fruit country. Where mercury ranges between 55 and old Frost and sun-stroke is unknown. Also a great health resort. He will mail this book FREE by addressing, 7A121

B. A. Hadsell, Lititz, Pa. Please mention Am. Bee Journal when writing.

Mexico as a Bee-Country | TEXAS HEADOUARTERS

Root's Supplies for Bee-Keepers.

Makers of Weed New Process Comb Foundation.

Buy Honey and Beeswax.

Catalogs Free.

Toepperwein & Mayfield Co.

Cor. Nolan & Cherry Sts.,

San Antonio, Texas.

Please mention Am. Bee Journal when writing. Myers Famous Lockstitch Sewing Awl

Is designed particularly for farmers' use, but it will be found a time-saver and money-saver in nearly every household. It is not a novelty, but a practical hand-sewing machine for repairing shoes, harness, belts, carpets, rugs, tents, awnings, canvas of all kinds, gloves, mittens, saddles, etc.; you can also tie comforts. The Awl proper is grooved to contain the thread or waxed end, and the point being diamond shape will go through the thickest of leather, green or dry, any thickness.

The "Myers Awl" can be used with either straight or curved needle, both of which come with the outfit, and veterinarians will find it indispensable for sewing up wire cuts in stock. The "Myers Lock-Stitch Sewing Awl" is a necessity for the people; can be carried



In pocket or tool chest: nothing to lose, always ready to mend a rip or tear. Better than rivets because it is portable. Can be carried in mower or harvester tool-box, threshing kit, or anywhere. If you save one trip to town for mending, you are money ahead. Every farmer needs one, every man who teams needs one. It is the most practical hand-sewing machine for actual use ever devised. Put up with straight and curved needles, waxed thread, illustrated book of directions, and everything ready for use.

Our Special Offers of this Famous Sewing Awl.

We mail the Myers Lock-Stitch Sewing Awl for \$1.00; or club it with the American Bee Journal for one year—both for only \$1.60; or we will mail the Awl free as a premium for sending us only Two New Subscriptions to the American Bee Journal for one year, with \$2.00. Surely here is an article that will be very useful in every home. Address all orders to—

George W. York & Co.,

Chicago, III.

The Campbell System

INSURES your crop against DROUTH Our experience in 1910 and 1911 has proved that good crops can be grown with less than eighteen inches of Those who followed the Campbell System in 1910 had a crop in 1911.

Don't Take Any Risks for 1912

Campbell's publications explain the system.

Campbell's Scientfic Farmer Campbell's Soil Culture Manual Combination Price

Campbell's Soil Culture Co., Lincoln, Neb.

When you write ask about the Campbell Correspondence School. 8Atf Please mention Am. Bee Journal when writing,

Sweet Clover Seed!

Sweet Clover is rapidly becoming one of the most useful things that can be grown on the farm. Its value as a honey-plant is well known to bee-keepers, but its worth as a forage-plant and also as an enricher of the soil are not so widely known. However, Sweet Clover is coming to the front very fast these days. Some years ago it was considered as a weed by those who knew no better. The former attitude of the enlightened farmer today is changing to a great respect for and appreciation of Sweet Clover, both as a food for stock and as a valuable fertilizer for poor and worn out soils.

The seed can be sown any time. From 18

The seed can be sown any time. From 18 to 20 pounds per acreof the unhulled seed is about the right quantity to sow.

We can ship promptly at the following prices for the white variety:
Postpaid, I pound for 30 cents, or 2 pounds for 50 cents. By express f. o. b. Chicago—5 pounds for 80c; 10 pounds for \$1.50; 25 pounds for \$1.50; 20 pounds for \$1.2.00.

If wanted by freight, it will be necessary to add 25 cents more for cartage to the above prices on each order.

George W. York & Company,

117 N. Jefferson St., CHICAGO, ILL.

"The Honey-Money Stories"

This is a 64-page and cover booklet, 5¾ by 8½ inches in size, and printed on enameled paper. It contains a variety of short, bright stories, mixed with facts and interesting items about honey and its use. It has 31 halfhoney and its use. It has 31 half-tone pictures, mostly of apiaries or apiarian scenes; also 3 bee-songs, namely: "The Hum of the Bees in the Apple-Tree Bloom," and "Buck-wheat Cakes and Honey," and "The Bee-Keeper's Lullaby." It ought to be in the hands of every one not familiar with the food-value of honey. Its obwith the food-value of honey. Its object is to create a larger demand for honey. It is sent postpaid for 25 cents, but we will mail a single copy as a sample for 15 cents, 5 copies for 60 cents, or 10 copies by express for \$1.06. A copy with the American Bee Journal one year—both for \$1.10. Send all or one year—both for \$1.10. Send all ders to the American Bee Journal.

Queens! Queens!

200 to 300 per month. Virgin, 75C; Untested, \$1.00; Tested, \$1.25; Select Tested, \$2.00; and Breeders, \$3.00. Nuclei, Full Colonies, Bees by the Pound. Have letter from State certifying my bees are free from foul brood.

FRANK M. KEITH. 831/2 Florence St., Worcester, Mass.



"How to Keep Bees," A. Botsford Comstock.

A simple book, written in a clear, every-day language, is much to be preferred, even if it does not treat of quite so many little details, which interest only the professional beekeeper. Such is "How to Keep Bees," written by a gifted author, who made a start in beekeeping three different times, thus being afforded the opportunity of personally finding out the difficulties and trials that beset the beginner with bees. It is a book written by an amateur to amateurs, so eminently readable, that any one interested in the subject can sit down and devour it clear through, as though it were a modern novel. The print is large, and typographically as well as rhetorically, it is the peer of any such book now on the market. It is bound in cloth, and contains 228 pages.

There are 20 chapters in the book as follows:

- 1. Why Keep Bees?
 2. How to Begin Bee-Keeping.
 3. The Location and Arrangement of the Apiary
 4. The Inhabitants of the Hive.
 5. The Industries of the Hive.
 6. The Swarming of Bees.
 7. How to Keep from Keeping Too Many Bees.
 8. The Hive and How to Handle It.
 9. Details Concerning Honey.
 18. Extracted Honey.

- 11. Points About Beeswax.
 12. Feeding Bees.
 13. How to Winter Bees.
 14. Rearing and Introducing Queens.
 15. Robbing in the Apiary.
 16. The Enemies and Diseases of Bees.
 17. The Anatomy of the Honey-Bee.
 18. The Interrelation of Bees and Plants.
 19. Bee-Keepers and Bee-Keeping.
 20. Bee-Hunting.

There is also a bibliography and index. From a beginner's standpoint it is a complete treatise on bees, and we can not do better than recommend it. In fact, it should find a place in every bee-keeper's library.

Our Offers of this Interesting Book.

We mail this book for \$1.10; or we club it with the American Bee Journal one yearboth for \$1.75; or, we will mail it free as a premium for sending us 3 new subscriptions to the American Bee Journal for one year with \$3.00 to pay for the subscriptions. Address.

GEORGE W. YORK & CO., 117 No. Jefferson St., CHICAGO, III.

A Few Dollars Invested on Easy Terms in a

Twin Falls, Idaho, Orchard

An Income For Life

sufficient to keep a family in comfort. It will pay for a home that is not an expense, but

Source of REVENUE

Or, for an investment which will pay from 100% to 500% every year as long as you live, and longer, after it comes into bearing.

By calling at our office, or writing us, you can obtain full information.

Twin Falls Co-operative Orchard Co.

881 Stock Exchange Bldg., Chicago, Ill.

50,000 Copies "Honey as a Health-Food" To Help Increase the Demand for Honey

We have had printed an edition of over 50,000 copies of the 16-page pamphlet on Honey as a Health-Food." It is envelope size, and just the thing to create a local demand for honey.

The first part of it contains a short article on "Honey as Food," written by Dr. C. C. Miller. It tells where to keep honey, how to liquefy it, etc. The last is devoted to "Honey Cooking Recipes" and "Remedies Using Honey." It should be widely circulated by those selling honey. The more the people are educated on the value and uses of honey as a food, the more honey they will buy.

Prices, prepaid-Sample copy for a 2-cent stamp: 50 copies for 90 cents; 100 copies for \$1.50; 250 copies for \$3.00; 500 for \$5.00; or 1000 for \$9.00. Your business card printed free at the bottom of front page on all orders for 100 or more copies.

Address all orders to

GEORGE W. YORK & CO.,

Chicago, Ill.



Are our Specialty. Winter your bees in Protection Hives. Liberal early-order discounts.

A. G. Woodman Co., Grand Rapids, Mich.

Write us before disposing of your Honey Crop.

HILDRETH & SEGELKEN.

265-267 Greenwich St.,

NEW YORK, N. Y.

Closing Out

We Have Some Copies Left of the Book

bound in cloth, that we offer cheap to close out. It contains 160 pages, and is bound in cloth. It used to be a onedollar book, but we will mail them, so long as they last, at 50 cents each; or with the American Bee Journal one year—both for only \$1.20. Surely this is a bargain. The book is well this is a bargain. The book is well illustrated, and has some good information in it, especially for beginners. Address all orders to

George W. York & Co., 146 W. Superior St., Chicago, Ill.

COST SALE

Of BEE-KEEPERS' SUPPLIES for the next 4 months. Too big Stock to carry over. Write your wants; I will make price to suit. Sept. 26, 1911.

W. D. Soper, 323 and 325 Jackson, Mich.

Engravings for Sale.

We are accumulating quite a large stock of bee-yard engravings and other pictures used from time to time in the American Bee Journal. No doubt many of them could be used by bee-keepers in their local newspapers, on their letterheads, on souvenir cards, or in other profitable or interesting ways. If we can sell them it will help us to pay for others that we are constantly having made and using in these columns.

We do not have a catalog or printed list of the engravings, but if you will let us know just which you want we will be pleased to quote you a very low price, postpaid. Just look through the copies of the Bee Journal and make your selection. Then write to us.

GEORGE W. YORK & CO.

CHICAGO, ILL



HONEY AND BEESWAX

CHICAGO, Oct, 30.—There have been free receipts of comb honey from the Western States, and the market at present is well supplied. Prices are steady for A No. 1t of fancy at 17@18c per lb.; very little fancy—enough to bring the outside quotation; the other grades range from 12% cper lb. less in value, the amber grades being particularly hard to move. Extracted remains steady at from 80% cper lb. for the white, and 70% c per lb. for amber. There is a good demand for beeswax at 32c per lb. if a good color and clean.

R. A. BURNETT & CO.

CINCINNATI, Oct. 31.—The market on comb honey is good, retailing at \$4.00 per case; jobbing lots \$3.60 and \$3.75. according to quantity. No demand for off grades or dark comboney. Light amber, in barrels, 6½@pc; in cans, 8½C. White table honey in cans, 10@Irc. Beeswax in fair demand, and is selling at \$33 per 100 pounds.

per 100 pounds.

The above are our selling prices, not what
C. H. W. WEBER & CO.

KANSAS CITY, Mo., Oct. 31.—The receipts of both comb and extracted honey are more liberal, but not heavy; demand fair. We quote; No. 1 white comb, 24 sections, \$3.25 to \$3.35; No. 2, \$3.00; No. 1 amber, \$3.10@\$3.25; No. 2, \$2.75@\$3.00; extracted, white, per lb., 9@0½c; amber, 7@0c. Beeswax, 25@28c.

C. C. CLEMONS PRODUCE CO.

DENVER, Oct. 18.—Warm weather and abundance of fruit has had a depressing influence on the local honey market, and for that matter also on the carload business. We are quoting our local market in a jobbing way as follows: No. 1 white comb, per

case of 24 sections, §3.15; No. 1 light amber, \$2.92, and No. 2, \$2.70. White extracted, o@10c; light amber, 8@0c; amber strained, 7½c. We are paying 25c cash, or 27c in trade, for clean yellow beeswax delivered here.

The Colo. Honey-Producers' Ass'n.
F. Rauchfuss, Mer.

INDIANAPOLIS, Oct. 30.—The demand for white comb honey exceeds the supply. Jobbers pay 18c per lb. for fancy white, and in single-case lots sales are being made for 20@22c per lb. Extracted is more plentiful, and is being offered by jobbers at 10@11c for best quality. Beeswax is in good demand, and producers are being paid 30c per pound, and producers are being paid 30c per pound.

WALTER S. POUDER.

New York, Oct. 30.—The demand for comb honey is good, especially for all grades of white. Receipts, however, on account of the short crop, are rather light. We quote: Fancy white, 16@17c per lb.; No. 1, 14@15c; No. 2, 13c; mixed and buckwheat, 10@11c. Extracted is also in good demand, especially the lighter grades. We quote: California water-white at 10c per pound; white, 0@0%c; light amber, 8@8%c; white clover and basswood, 0@0%c; buckwheat, 7%c. Beeswax quiet at 30c.

HILDRETH & SEGELKEN.

CINCINNATI, Oct. 30.—Comb honey is becoming rather scarce. Strictly fancy we are selling to our trade at \$3.75 per case, f. o. b. our store, and it finds ready sale. Extracted honey is still coming in quite lively; amber extracted honey is selling at 6@7%c, according to the quality and quantity purchased, while strictly fancy water-white table honey is selling at 9@10c. For choice, bright yellow

beeswax absolutely free from dirt, we ar paying from 28@30c per pound, delivered here. The Fred W. Muth Co.

Names of Bee-Keepers Wanted.-We desire very much to have the names and addresses of all the bee-keepers who are in your locality who do not now take the American Bee Journal. We would like to get every one of them on our list of regular readers. If you will send to this office the names and addresses of such bee-keepers, we will be pleased to mail each a sample copy of the American Bee Journal. Perhaps you could send in their subscriptions, and thus earn some of the various premiums that we offer from time to time for getting new subscriptions. We feel that every bee-keeper ought to read the American Bee Journal regularly. He would not only be more successful, but would be less of a competitor of his neighbor bee-keepers, if he were more enlightened on the subject of bees and honey. We would appreciate it very much if all who can do so will send us the names and addresses of their bee-keeping neighbors who do not at present receive the American Bee Journal.

We want to buy.

We want to sell

We are always in the market for Honey, both Comb and Extracted, if quality and price justify. Should you have any to offer, let us hear from you. If Extracted, mail sample, and state how it is put up, and lowest price; if Comb, state what kind, and how packed.

If in the market for Honey, write for prices.

CANS

CANS

We have a surplus of Second-Hand 5-Gallon Cans, two to a case, as good as New, used but once. Offer same, while they last, at 25c per case f. o. b. incinnati. Order quick, if you want any.

C. H. W. Weber & Co., 2146 Central Ave., Cincinnati, Ohio.

Less 5 Percent Discount During NOVEMBER "Falcon"

The ⋈ Standard ⋈ Bee-Keepers' ⋈ Supplies

KANSAS CITY, MO.

The Freight Center of the Western States

A complete stock of "Falcon" hives, sections, foundation, smokers, shipping-cases, extractors, etc., is kept in stock at this centrally located house for prompt shipment at a great saving of freight. "Falcon" goods, hives and supplies made right, may be obtained from this point less the maximum early order discount. Write for Red Catalog and send list of 1912 requirements for quotation to C. C. Clemons Bee Supply Company, 130 Grand Avenue, Kansas City, Mo.

CHICAGO, ILL.

The Freight Center of the Middle States

Our branch, W. T. Falconer Mfg. Co., 117 North Jefferson St., Chicago, Ill., is **the only bee-supply house in the business section** of this metropolis of the States. Surrounded on every hand by freight and express depots we are pre-eminently fitted to take care of your wants, making shipment by the cheapest and most direct route to you.......and there is never any charge for drayage to depot. Let us quote you less early order discount from this freight-saving center.

"falcon" dealers are in every State and encircle the Globe. Write for name of nearest one to you.

W. T. Falconer Mfg. Company,

"Where the Good Bee-Hives Come From"

Factory: Falconer, N. Y.

117 North Jefferson Street, CHICAGO, ILL.

You Want a Home

WHERE pure water is plentiful, comes when you wish, and stays when you will;

WHERE cyclones are unknown, and blizzards impossible:

WHERE crops never fail from drouth, and the unhoused harvest is never damaged by storms;

WHERE your stock can feed and fatten on pastures that are always green; and you can work in your fields with profit and pleasure every day in the year—except Sunday:

WHERE you can grow to perfection all the pleasant fruits, and all else that can contribute to make your home a paradise;

WHERE you can raise two crops of some things

(on the same ground the same season), and continuous crops of other things, giving you "a money harvest" to sell every week in the year;

WHERE "sunny days" cover two-thirds the time, and yet sunstroke or "death or damage from heat" are unknown;

WHERE bees banquet in fields of never-fading flowers, securing rich stores of honey—which they do not consume "in wintry hours;"

WHERE you can grow Figs, Olives, Oranges, Apricots, and Almonds, to perfection, and be sure of a large price, as none of these (except perhaps oranges) are grown in commercial quantities anywhere else in the United States.

YOU WANT A FAIRY FARM

WHERE you can (with the help of your boys) take the best care of it—thus forever ending the torturing ghost of "hired help;"

WHERE "your boys" will get rich on berrypatches, and "the women-folks" with poultry—as a by-product;

WHERE you can get more net cash every year

from ten acres than can be wrested from a quarter section of the best farm land in the Mississippi Valley, and all this while escaping the lonesome isolation and dreary drudgery inseparable from the larger farming.

You want to know all about this wonderful land. You can secure full and accurate information by writing to

E. S. WEEDEN, OROVILLE, CALIF.

Stating you saw this advertisement in the American Bee Journal. Reference-Editor American Bee Journal.